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556	Optimized Statistical Test for Event Detection in Non-Intrusive Load Monitoring	Leen De Baets (Ghent university - imec);Joeri Ruysinck (Ghent University - imec);Chris Develder (Ghent University - imec);Tom Dhaene (Ghent University - imec);Dirk Deschrijver* (Ghent University - imec)*
561	A new linearized behavioral model for solar cells	Sergio Romero-Camacho* (Faculty of Electronics Science BUAP)*;Víctor González Díaz (Faculty of Electronic Science BUAP);Roberto Ambrosio-Lázaro (Faculty of Electronic Science BUAP);Gerardo Mino-Aguilar (Faculty of Electronic Science BUAP);Edoardo Bonizzoni (University of Pavia);Franco Maloberti (University of Pavia)
567	An improved Analog Maximum Power Point Tracking circuit for solar cells suitable for abrupt variations in irradiation levels	Sergio Romero-Camacho* (Faculty of Electronics Science BUAP)*;Víctor González Díaz (Faculty of Electronic Science BUAP);Roberto Ambrosio-Lázaro (Faculty of Electronic Science BUAP);Gerardo Mino-Aguilar (Faculty of Electronic Science BUAP);Edoardo Bonizzoni (University of Pavia);Franco Maloberti (University of Pavia)
573	Comparison Analysis of the Voltage Variation Ranges for Distribution Networks	Jinsik Lee* (Korea Electric Association)*;Gi Hyun Kim (Korea Electric Association)
576	The Mechanism Analysis of Sub-Synchronous Oscillation in PMSG Wind Plants	Feng Gao ;Bingqing Wu* (Xi'an Jiaotong University)*; Baohui Zhang (Xian Jiaotong University);Qifei He ;Duo Wang ;Wei Ba
582	Study on Characteristics of Grounding Impedance of Large Grounding Grid	Zhizhong Li (Shanxi Electric Power Research Institute);Sen Wang (Shanxi Electric Power Research Institute);Feng Guo (Shanxi Electric Power Research Institute); Bo Zhang* (Tsinghua University)*
N/A	The Influence Of Technical Changes On The Product Selling Price	Eva Vitkova* (Brno University of Technology)*
586	Optimization of the manufacturing process of a stranded cable	Napieralska Juszczak Ewa* (Universit d'Artois)*;Piotr Napieralski (Institute of Information Technology, Lodz University of Technology, Poland)

592	A Control Architecture to Coordinate DG Inverters and a Series-LC-Filtered Hybrid Active Filter for Power Quality Improvement in Micro-Grid	Mingmin Zhang (Hunan University);Yong Li (Hunan University);Fang Liu* (Central South University)*;Yijia Cao (yjcao@hnu.edu.cn);Wenguo Li (Hunan University)
597	Traditional Random Utility models vs Hybrid choice models for assessing environmental impacts of a new technology: the HySolaKit case study	Stefano De Luca* (University of Salerno)*;Roberta Di Pace (University of Salerno)
603	On the Hazardous Situations Due to the Presence of HV/MV Substations in Urban Areas	Maria Luisa Di Silvestre* (University of Palermo)*;Eleonora Riva Sanseverino (DEIM University of Palermo);Gaetano Zizzo (DEIM University of Palermo); Pietro Colella (Politecnico di Torino);Enrico Pons (Politecnico di Torino);Jaser Sa'ed (Birzeit University)
607	The Potential Effects of Real-Time Parking (RTP) Systems on Cruising for Parking and Greenhouse Gas Emissions	Mariano Gallo* (Universita' del Sannio - Dipartimento di Ingegneria)*;Filippo Montone (Università del Sannio)
613	Nonsy Load Flow: Smart Grid Load Flow Using Non-Synchronized Measurements	Alireza Bahmanyar (Iran University of Science and Technology);Abouzar Estebarsari* (Politecnico di Torino)*;Amin Bahmanyar (Islamic Azad University);Ettore Bompard (Politecnico di Torino)
618	Lightning-Current Distribution in MV Grids Interconnected Earthing Systems	Gaetano Zizzo* (Universit degli Studi di Palermo)*;Guido Ala (University of Palermo); Graziella Giglia (University of Palermo);Elisa Francomano (Università di Palermo)
624	A Branch and Bound Algorithm to Solve Nonconvex MINLP Problems via Novel Division Strategy: An Electric Power System Case Study	Marcos Jesus Delgado* (UFMT)*;Mahdi Pourakbari Kasmaei (UNESP, UCLM); Marcos Rider (UNESP)
630	Carbon Footprint Allocation Among Consumers and Transmission Losses	Mahdi Pourakbari Kasmaei* (UNESP, UCLM)*;Mohammadreza Habibi (SBUK);Masoud Rashidinejad (SBUK);Javier Contreras (University of Castilla-La Mancha);Jose Sanches Mantovani (Universidade Estadual Paulista)
636	An Electric Railway Power Conditioning System Based on Asymmetrical Connection Balance Transformer	Bonan An (Hunan University); Yong Li* (Hunan University)*;Fang Liu (Central South University);Yijia Cao (yjcao@hnu.edu.cn);Ye Cai (Changsha University of Science & Technology)
641	An Analysis of Delay-based and Integrator-based Sequence Detectors for Grid-Connected Converters	Hesam Khazraj* (Aalborg university)*;Filipe Faria da Silva (Aalborg university);claus Leth Bak (Aalborg university)
646	A Smart Ward with a Fall Detection System	Mu-Chun Su* (National Central University, T)*;Jia-Wei Liao (national Central University, Taiwan);Pa-Chun Wang (Cathay General Hospital, Taiwan);Chen-Hsu Wang (Cathay General Hospital, Taiwan)
650	Health and Well-being in indoor work environments. A review of literature	Michele Rocca* (University Of Pisa - School Of Engineering - Dept Of Energy)*
656	The Impact of Battery Electric Buses in Public Transport	Gaetano Valenti ;Carlo Liberto ;Maria Lelli ;Marina Ferrara ;Marialisa Nigro* (Roma Tre University)*;Carlo Villante
661	Efficiency Optimization of Small Hydro Power Plantt in Low Power Operation	Ondrej Rubes* (Brno University of Technology)*;Dalibor Cervinka (Brno University of Technology)
666	An Analytical Approach for Determining Reserve Times on Metro Systems	Luca D'Acierno* (Federico II Univ of Naples)*;Marilisa Botte (federico II University of Naples);Bruno Montella (Federico II University of Naples)

672	Optimal Scheduling of a Multi-Carrier Energy Hub Supplemented By Battery Energy Storage Systems	Mohammad Javadi ;Amjad Anvari-Moghaddam* (Aalborg University)*; Josep M. Guerrero (University of Aalborg)
678	Simulation approach of indoor thermal comfort improvement with use of Phase Change Materials	stephane guichard * (Lineact Cesi)*;Karim BEDDIAR (CESI);Miranville Frédéric (université Réunion);boyer Harry (université la Réunion)
681	Passive mitigation of stray magnetic fields generated by underground power lines	Aldo Canova* (Politecnico di torino)*;luca giaccone (Politecnico di Torino);paolo Ribaldone (Terna spa);Giuseppe Lavecchia (Terna spa)
N/A	Recent developments in photovoltaic electricity in Turkey and a site dependent analysis	Mustafa Baçoğlu* (Kocaeli University)*; Bekir akir (Kocaeli University)
686	Comparative Study between Rule-based and Frequency Separation Energy Management Strategies Within Fuel-Cell/Battery Electric Vehicle	Hamza ALLOUI* (Ecole Militaire Polytechnique)*
691	Algorithm for Out-of-Step Condition Detection and Early Warning Using Phasor Measurement Unit Data	Igor Ivankovic (Croatian Transmission System Operator Ltd);Igor Kuzle (University of Zagreb Faculty of Electrical Engineering and Computing);Ninoslav Holjevac* (University of Zagreb Faculty of Electrical Engineering and Computing)*
N/A	Investigation into H-infinity Control of Brushless Doubly Fed Induction Generator	Abderahmane Ganouche* (Université 20 Août 1955 Skikda)*; Hacene Bouzekri (automatique laboratory of skikda, universit du 20 Aout 1955, skikda, Algeria);Antar Beddar
697	Optimal Bypass Diode Configuration for PV Arrays under Shading Influence	Quan Duong (The University of Danang-University of Science and Technology); Gabriela Nicoleta Sava* (University Politehnica of Bucharest)*;Gabriela Ionescu (University POLITEHNICA of Bucharest);Horia Necula ;Sonia Leva (Politecnico di Milano);Marco Mussetta (Politecnico di Milano)
702	Efficiency Analysis of a Hybrid Power System for a Campus in Romania	Gabriela Nicoleta Sava* (University Politehnica of Bucharest)*;Gabriela Ionescu (University POLITEHNICA of Bucharest);Horia Necula (University POLITEHNICA of Bucharest);Mircea Scripcariu (University POLITEHNICA of Bucharest);Quan Duong (The University of Danang-University of Science and Technology);Sonia Leva (Politecnico di Milano);Marco Mussetta (Politecnico di Milano)
707	Regulation issues for renewable energy integration into electrical markets	Jorge Llamas* (Universidad de Córdoba)*;David Bullejos (Universidad de Cordoba);Manuel Ruiz de Adana (Universidad de Córdoba);Vicente Barranco (Universidad de Córdoba)
713	Experimental Evaluations of Global Maximum Power Point Tracking Approaches in Partial Shading Conditions	Mustafa Baçoğlu* (Kocaeli University)*; Bekir akir (Kocaeli University)
718	Towards a unified approach for Distributed Measurement System Technologies	Francesco Lamonaca* (University of Sannio)*;Domenico Grimaldi (DIMES, University of Calabria);Domenico Luca Carnì (DIMES, University of Calabria);Paolo Francesco Sciammarella (DIMES, University of Calabria);Luigi Martirano (University of Rome Sapienza)

724	Review of Loss of Excitation Protection Setting and Coordination to the Generator Capacity Curve	Maria Dolores Lopez (Universidad Politecnica de Madrid); Carlos A. Platero* (Universidad Politecnica de Madrid)*;Pablo Mayor de Bergia (Technical University of Madrid);Ricardo Granizo Arrabé (UPM)
730	Predictive Control for an Asymmetric Multilevel Converter for PV Energy Injection	Javier Munoz* (Universidad de Talca)*;Fausto Cadena (Universidad de Talca);Patricio Gaisse (Universidad de Talca);Marco Rivera ;Eduardo Espinosa ;Raul Gregor
N/A	UAV Application in Search and Rescue Missions within Forests: Analysis of the Voice-based Target Detection Approach	Azhar Hosenbocus (Middlesex University (Mauritius Branch Campus));Girish Bekaroo* (Middlesex University)*;Aditya Santokhee (Middlesex University (Mauritius Branch Campus))
735	Power Quality and Custom Power Seeking for a Common Solution in LV Distribution Network	Hossein Hafezi* (Politecnico Di Milano)*;Roberto Faranda (Politecnico Di Milano)
741	Geolocation for LPT - Use of geolocation technologies for performance improvement and test of Local Public Transport	Fabio Pompei* (GL Group)*
746	DC or AC Distribution? an Economic Evaluation	Roberto Faranda (Politecnico Di Milano);Hossein Hafezi* (Politecnico Di Milano)*;Luigi Martines (Onda Energia)
752	Sustainable Campus: Renovation of lighting fixtures for the reduction of CO2 emissions	Sonia Leva* (Politecnico di Milano)*;Fabiana Satta ;Alberto Dolara (Politecnico di Milano)
758	Artificial lighting in low energy buildings as unique backup heating system	Brunello Favilla* (Pisa University)*;Fabio Fantozzi (University of Pisa - DES-TeC Department);Giacomo Salvadori (UNIVERSITY OF PISA - SCHOOL OF ENGINEERING - DEPT OF ENERGY);Peter Widerin
764	Energy Management of Hybrid PV-Storage Systems for Improved Grid Integration	Maria Carmela Di Piazza (CNR-ISSIA);Massimiliano Luna* (CNR-ISSIA)*;Giuseppe La Tona (CNR-ISSIA);Annalisa Di Piazza
769	Review of Technical Issues and Challenges in the Development of Community Grids	Sebastian Rosado* (Intl. Energy Research Centre)*;Shafiuzzaman Khadem (Intl. Energy Research Centre)
775	Optimal Damped-type Single Tuned Filters for Mitigating Harmonics using MIDACO	Nor Hidayah Binti Abdul Kahar (Brunel University London);Ahmed Zobaa* (Brunel University)*
779	An AHP-Based Method to Assess the Introduction of Electric Cars in a Public Administration	Michela Zornada* (University of Trieste)*;Giovanni Longo (University of Trieste);Elio Padoano (University of Trieste);Cristian Giacomini
785	Optimal Operation Strategy of a Hybrid PV-Battery System under Grid Scheduled Blackouts	Mansour Alramlawi* (Technische Universität Ilmenau)*; Aouss Gabash (Ilmenau University of Technology, Department of Simulation and Optimal Processes); Pu Li (Ilmenau University of Technology, Department of Simulation and Optimal Processes)
790	System Identification and Tuning of WPT Systems	Johan Winges* (Chalmers Univ. of Tech.)*;Thomas Rylander (Chalmers Univ. of Tech.);Carl Petersson (QrTech);Christian Ekman (QrTech);Lars-Åke Johansson (QrTech);Tomas McKelvey (Chalmers Univ. of Tech.)

795	The Influence of the Monoethanolamine Concentration on the Performances of the Coal-Fired Thermal Power Plant with CO ₂ Capture and Storage	Mihaela Norisor (University Politehnica of Bucharest);Victor Cenusă* (Univ. Politehnica of Bucharest)*
801	An experimental study on relationship between LED lamp characteristics and non image-forming	Mauro Mosca (Università degli Studi di Palermo - DEIM);Roberto Macaluso (Università degli Studi di Palermo - DEIM);Laura Cirrincione (University student);Maria La Gennusa (Università degli Studi di Palermo-DEIM);Fabio Massaro (DEIM University of Palermo); Gianluca Scaccianocce* (University of Palermo)*
807	Peak Shaving and Power Losses Minimization by Coordination of Plug-In Electric Vehicles Charging and Discharging in Smart Grids	Meysam Amirahmadi* (Islamic azad university)*;Somayyeh Khatiri-Doost (Islamic Azad University)
812	Outdoor Power Stations CCTV Systems that Work Synergistically with the Security Lighting	Petr Bos* (VSB TU Ostrava)*;Richard Baleja (VSB TU Ostrava);Karel Sokan-sky (VSB TU Ostrava);Tomas Novak (VSB TU Ostrava)
817	Use of Value Stream Mapping for Evaluation of Load Conservation and Peak Clipping Possibilities	Raivo Melsas* (TUT)*;Argo Rosin (TUT)
823	Flexible PQ Control for Single-Phase Grid-Tied Photovoltaic Inverter	Mohamed Azab* (Benha University)*
829	Determination of the Effect of Short-Term Interruptions in Mains Voltage on the Reliability of Consumer Electronics Products	Murat Demir* (Vestel Electronics)*;Ali Bekir Yıldız (Kocaeli University);Murat İltir (Vestel Electronics)
834	Towards the Development of Residential Smart Districts: the Role of EVs	Michela Longo* (Politecnico di Milano)*;Federica Foadelli (Politecnico di Milano);Federico Frattini (Politecnico di Milano);Simone Franzò ;Vito Manfredi Latilla (Politecnico di Milano)
840	Photovoltaic system equipped with a solar concentrator and two-axis tracking system	Kamil Plachta* (Wroclaw University of Science)*
845	Solving Company Cooperation Tasks in the Construction of Power Transmission Lines	Igors Moskins* (Riga Technical University)*; Jevgenijs Kucajevs (Riga Technical University, Institute of Power Engineering)
850	A case study on the interoperability of the Direct Transfer Trip (DTT) technique with carrier signal protection schemes (PTT and DEF) and SCADA system between two Utilities in Thailand	Chow Chompoo-inwai* (Faculty of Engineering, KMITL)*;Naradon Chotivanaporn (EE Dept, Engineering Faculty, KMITL);Chai Chompoo-inwai (EE Dept, Engineering Faculty, KMITL)
857	Reconfiguration of Smart Distribution Network Considering Variation of Load and Local Renewable Generation	Raouf hasanpour ;Belal Mohamadi Kalesar* (APED Co.)*;Javad Behkesh noshahr (Aped co);Payam Farhadi
862	Comparative analysis of monitored and self-reported data on electricity use	Kiti Suomalainen* (University of Otago)*;Michael Jack (University of Otago);David Eyers (University of Otago);Rebecca Ford (University of Oxford);Janet Stephenson (University of Otago)

866	Fostering Innovation Cooperative Energy Storage Systems: the Storage4Grid Project	Riccardo Tomasi* (Istituto Superiore Mario Boella)*;Fu Jinyong (ISMB);Maurizio Fantino (ISMB);Maurizio Spirito (ISMB);Mihai Sanduleac (UPB);veronika Krauss (Fraunhofer FIT);João Martins (UNINOVA);Massimo Minighini (Alperia Group);Rasmus Mosbæk (Lithium Balance A/S)
872	Study, Analysis and Optimization of Multilevel Inverters Based in a High Stepping DC/DC Converter for Renewable Energies	Alejandro Zavala Bárcenas (Technological Institute of Morelia);Benjamin Vidales Luna* (Universite Lorraine)*;Manuel Madrigal Martinez (Technological Institute of Morelia);domingo Torres Lucio (Instituto Tecnológico de Morelia)
876	A Particle Swarm Optimization Approach for Sliding Mode Control of Electromechanical Valve Actuator in Camless Internal Combustion Engines	Roozbeh Samani ;Hamed Khodadadi* (Khomeinishahr branch, Islamic)*
880	Reuse EV battery system for renewable energy introduction to island power-grid	Yuki Matsuda* (Graduate School of Engineering, the University of Tokyo)*;Kenji Tanaka (Graduate School of Engineering, the University of Tokyo)
886	An integrated combinatorial auction method for the co-allocation of energy and reserves implemented on a two-level time scale	Dávid Csercsik* (PPKE ITK)*
892	Capacity Optimization for Hybrid SMES-BES used in Dynamic Voltage Restorer	Chun-Jun Huang* (Sichuan University)*;Xianyong Xiao ;Zixuan Zheng (Sichuan University);Changsong Li
N/A	Optimal Self-healing Solution for Electric Distribution Networks with High Distributed Energy Resources Penetrations	Zitong Song* (Accenture)*;Qin Zhou (Accenture);jianhua Zhang (ceepower)
897	Energy Management Optimization Scheme for Smart Home Considering Different Types of Appliances	Leehter Yao (National Taipei U. of Tech.);Zolboo Damiran* (National Taipei University of)*;Wei Hong Lim (National Taipei University of Technology)
903	Power Quality Enhancement of UPQC Connected WECS using FFA with RNN	Senthil Vadivu Uthirapathi* (PES Institute Of Technology)*
909	Fire Risk Assessment and Cable Selection for End-User Substations	Gaetano Zizzo* (Universit degli Studi di Palermo)*;Salvatore Favuzza (DEIM University of Palermo);Massimo Mitolo (Irvine Valley College)
915	Active load sharing technique for on-line efficiency optimization in DC microgrids	Gaetano Zizzo* (Universit degli Studi di Palermo)*;Eleonora Riva Sanseverino (DEIM University of Palermo);Valeria Boscaïno (University of Palermo);Josep M. Guerrero (University of Aalborg);Lexuan Meng (Aalborg University)
920	Innovative algorithms for the management of combined RES-BESS systems	Gaetano Zizzo* (Universit degli Studi di Palermo)*; Diego La Cascia (DICGIM Department of Chemical Engineering, Management, Computer Science, Mechani);Salvatore Favuzza (DEIM University of Palermo); Luigi Dusonchet (Universit degli Studi di Palermo);Mariano Ippolito (DEIM - Università di Palermo);Salah Ben Mabrouk (CRTEN);Luigi Cancilla (Università di Palermo)
926	How to control supercapacitors and to account for the consequent extension of battery lifetime in an isolated AC microgrid	Norma Anglani* (University of Pavia)*;Giovanna Oriti (Naval Postgraduate School);Alexander Julian ;Vincenzo Catania

932	A Simplified Load Sharing Control for Parallel Inverters in Microgrid	Teymoor Ghanbari* (Shiraz university)*;vahid Azarm (Shiraz university);farzad Iraj (Shiraz university);ebrahim Farjah (Shiraz university)
938	Evaluating Voltage Fluctuations and Flicker Using Half-Cycle RMS Values	Daniel Geiger (Auburn University);Maria Arechavaleta (Auburn University);Mark Halpin* (Auburn University)*
943	Stand Alone Photovoltaic System with Integrated Online UPS to Smooth Output Fluctuations	Teymoor Ghanbari (Shiraz University);Mohammad Azma* (Shiraz University)*;Nima Tashakor (University);Ehsan Bagheri (University);Ebrahim Farjah (University)
949	Analysis of painted artworks' color appearance under various lighting settings	Francesca Feltrin* (Università di Pisa)*;Francesco Leccese (University of Pisa);Peter Hanselaer (KU Leuven);Kevin Smet (Light & Lighting Laboratory, Catholic University Leuven, College Gent)
N/A	An Experimental Procedure for Establishing the Optimal Sintering Temperature of New Metal Oxide Varistors	Bogdan Filip (POLITEHNICA University of Timisoara);Flaviu Frigura-Iliasa* (POLITEHNICA University of Timi)*;Doru Vatau (POLITEHNICA University of Timisoara);Mihaela Frigura-Iliasa (POLITEHNICA University of Timisoara);Petru Andea (POLITEHNICA University of Timisoara);Florin Balcu (National Institute for Research and Development in Electrochemistry and Condens)
N/A	Implementation of Solar PV - Battery Storage using DVR for Power Quality Improvement	Ravi Dharavath* (VIT University)*
955	A Review of Thermal Conductivity of Epoxy Composites Filled with AlN or BN	Josef Samek* (Brno University of Technology)*;Cestmir Ondrusek (Brno University of Technology);Jiri Kurfuerst (Brno University of Technology)
961	Thermal Load Management Experimental Investigation of Voltage Variation Effect on Loads Behavior	Roberto Faranda (Politecnico Di Milano);Hossein Hafezi* (Politecnico Di Milano)*;Zeinab shafizadeh ;Alfio Fontana (Gruppo Carrefour Italia)
966	Multi-objective Control of Central Air Conditioning System	Leehter Yao* (National Taipei U. of Tech.)*;Kebba Jaiteh (National Taipei University of Technology)
N/A	The Experimental Assessment of a New Material for Metal Oxide Varistors	Nicolae Tafulea (POLITEHNICA University of Timisoara);Flaviu FRIGURA-ILIASA* (POLITEHNICA University of Timi)*;Doru Vatau (POLITEHNICA University of Timisoara);Mihaela FRIGURA-ILIASA (POLITEHNICA University of Timisoara);Petru Andea (POLITEHNICA University of Timisoara);Florin Balcu (National Institute for Research and Development in Electrochemistry and Condens)
N/A	Contribution to EMC Modeling of DC-DC Converters	Bouزيد Karouche* (Ecole Militaire Polytechnique)*;Mohamed BENSETTI (centralesupelec);Abdelhalim ZAOUI (ECOLE MILITAIRE POLYTECHNIQUE)
972	Grid Interconnection of Renewable Energy Sources Based on Advanced Multi-Level Inverter	Mamadou Beye (esiee amiens);MOATAZ ELSIED* (Esiee amiens)*;augustin Mpanda (Eisee amiens);charles onambele (MIS-UPJV)
N/A	Forward Error Correction based Encoding Technique for Crosslayer Multi Channel MAC	Vikram K* (VIT University Vellore)*;Sarat Kumar Sahoo (VIT University Vellore);K V L Narayana (VIT University Vellore)
978	Optimal PV Electrical energy storage in office building's communal space lighting	Kristina Berzina (Riga Technical university);Kristina Berzina* (Riga Technical university)*;Inga Zicmane (RTU FPEE);Aleksejs Sobolevskis (Riga Technical University)
982	Evaluation of NB-PLC in Railway Environments	Gian Domenico Licciardo* (University of Salerno)*;Luigi Di Benedetto (University of Salerno);Alfredo Rubino (University of Salerno);Emilio Lanzotti (Ansaldo STS);Eduardo Piccirilli (Ansaldo STS)

987	Modelling 2x25 kV – 50 Hz traction systems for power frequency studies	Alfonso Capasso (University of Rome); Regina Lamedica (Sapienza University of Rome); Alessandro Ruvio (Sapienza University of Rome);Giovanni Aloisio (University of Rome);Massimo Ceraolo (University of Pisa);Giovanni Lutzemberger* (University of Pisa)*;Luca Sani (University of Pisa);Paolo Bolognesi (University of Pisa)
993	Application of Acceleration Method for Evaluation of Induction Motor Torque-Speed Characteristics	Marek Toman* (Brno University of Technology)*;Pavel Vorel (BUT);Radoslav Cipin (Brno University of Technology);Martin Mach (Brno University of Technology)
997	On the choice of wavelet based features in power quality disturbances classification	Marija Markovska* (Faculty of electrical engineering and information technologies, Skopje)*;Dimitar Taskovski (Faculty of electrical engineering and information technologies Ss Cyril and Meth)
1003	Assessment of N-1 Criteria Using Energy Storage	Zora Luburić* (FER, Zagreb)*;Hrvoje Pandzic (Faculty of Electrical Engineering and Computing, University of Zagreb, Croatia);Tomislav Plavsic (Croatian TSO, HOPS);Ljupko Teklic (Croatian TSO, HOPS);vladimir Valentic (Croatian TSO, HOPS)
1009	DC-BUS Voltage Ripple Minimization of Distributed DC-DC Converters Based on Phase Shifting Theory	Tarek Youssef (FIU);Moataz Elsied* (Esiee amiens)*;amrane Oukaour (caen university);hamid gualous (caen university);osama Mohamed (FIU)
1015	Impact of Manufacturing Proces on Optimal Shape of Induction Machine Slots	Martin Mach* (Brno University of Technology)*;Radoslav Cipin (Brno University of Technology);Marek Toman (Brno University of Technology);Vitezslav Hajek
1020	An Instrumental Contribution to Include the Impact of PV on Capacity Adequacy in Long-Term Energy Models	Fabrizio Fattori* (University of Pavia)*;Norma Anglani (University of Pavia)
1026	The Regulation Possibility of Energy-Intensive Enterprises According to the Market Price Change	Renata Varfolomejeva* (Riga Technical University)*;Aleksandrs Gavrilovs (JSC Sadales tikls);Inga Iljina (Ministry of Economics of the Republic of Latvia)
1032	Optimal reactive power dispatch problem solved by an Improved colliding bodies optimization algorithm	Anbarasan Palappan* (VIT University)*;Jayabarathi T (VIT University)
1038	Experimental Validation of the BAC Factor Method for Lighting Systems	Gaetano Zizzo* (Universit degli Studi di Palermo)*;Mariano Ippolito (DEIM - Università di Palermo);Marina Bonomolo (DEIM - Università di Palermo);Marco Beccali (DEIM - Università di Palermo);Valerio Lo Brano (University of Palermo)
1043	Study of Thermomagnetic Energy Conversion driven by Renewable Energy	Alessia Viola* (Federal University of San Pulo)*;Sergio Gama (University Federal of São Paulo);Marco Trapanese (University of Palermo);Carlos Vinicius Bessa ;Lucas Diego Rodrigue Ferreira
1049	Exploring crowdsourcing information to predict traffic-related impacts	Pavlos Tafidis* (University of Aveiro)*;João Texeira (University of Aveiro);Behnam Bahmankhah (University of Aveiro);Eloisa Macedo (University of Aveiro);Margarida Coelho (University of Aveiro);Jorge Bandeira (University of Aveiro)
1055	Numerical Simulation of Wave Energy Production through Experimental Tool	Alessia Viola* (Federal University of San Pulo)*;Domenico Curto (University of Palermo)
N/A	PSO based Collision-free Multichannel Superframe Scheduling for Zigbee Networks	Vikram K* (VIT University Vellore)*;Sarat Kumar Sahoo (VIT University Vellore);K V L Narayana (VIT University Vellore)

1060	Smart district energy optimization of flexible energy units for the integration of local energy storage	Giuseppe Paternò* (Engineering Ingegneria Informatica S.p.A.)*;Vincenzo Croce (Engineering Ingegneria Informatica S.p.A.);Eleonora Riva Sanseverino (DEIM University of Palermo); Antonello Monti (RWTH Aachen);Marilena Lazzaro (Engineering Ingegneria Informatica S.p.A.);Denisa Ziu (Engineering Ingegneria Informatica S.p.A.)
1066	Novel nanocomposite clay brick for strain sensing in structural masonry	Filippo Ubertini (University of Perugia);Antonella D'Alessandro* (University of Perugia)*;Annibale Materazzi (University of Perugia);Simon Laflamme (Iowa State University);Austin Downey (Iowa State University)
1070	Measurement Based Methodology for the Extraction of Lighting User Preferences in Working Environments	Varvara Katsanou* (Aristotle University)*;Aggelos Bouhouras (Aristotle University of Thessaloniki);Dimitrios Labridis (Aristotle University of Thessaloniki)
1076	On the Effects of BAC Systems and Load Control Programs on the Utility Grid	Gaetano Zizzo* (Universit degli Studi di Palermo)*;Mariano Ippolito (DEIM - Università di Palermo);Salvatore Favuzza (DEIM University of Palermo);Fabio Massaro (DEIM University of Palermo); Diego La Cascia (DICGIM Department of Chemical Engineering, Management, Computer Science, Mechani)
1081	Controller Design and Experimental Validation of a Power Charging Station for E-Bike Clever Mobility	Laura Celentano (University of Naples Federico II);Luigi Rubino* (University of Campania L. Vanv)*;Diego Iannuzzi (University of Naples Federico II)
1087	Optimal Design and Analysis of Anti-Resonance C-Type High-Pass Filters	Ahmed Lamlom (Cairo University);Ahmed Ibrahim (Cairo University);Murat Balci (Balikesir University);Alp Karadeniz (Balikesir University Balikesir, Turkey);Shady Abdel Aleem* (15th of May Higher Institute)*
1093	Design and Evaluation of a kW-Class SMES-BES DVR System for Mitigation of Power Quality Disturbances	Zixuan Zheng* (Sichuan University)*;Xianyong Xiao ;Chun-Jun Huang (Sichuan University);Changsong Li
1098	The influence of pyrolysis temperature on the chemical composition and the energy properties of char from tetrapak	Jana Růžičková ;Marek Kucbel * (ENET VSB-TU Ostrava)*;Petr Pavlik ;Helena Raclavská (ENET VSB-TUO);Hana Škrobánková ;Konstantin Raclavský ;Barbora Švédová ;Veronika Sassmanová ;Dagmar Juchelková
N/A	Plasma Enhanced Atomic Layer Deposition Technology for Advanced Silicon Heterojunction Solar Cells	Alexander Gudovskikh* (St. Petersburg Academic Univer)*;Alexander Uvarov (St. Petersburg Academic University);Ivan Morozov (St. Petersburg Academic University);Artem Baranov (St. Petersburg Academic University);Dmitry Kudryashov (St. Petersburg Academic University)
1102	The efficiency of the RES installations in typical household - a case study	Romuald Masnicki* (Gdynia Maritime University)*;Janusz Mindykowski (Gdynia Maritime University)
1108	Cost Evaluation of Current Uprating of Overhead Transmission Lines Using ACSR and HTLS Conductors	Somboon Nuchprayoon* (Chiang Mai University)*;Artitaya Chaichana (Electricity Generating Authority of Thailand (EGAT))
N/A	Analytical approach to maximize the torque density with size constraints for PMSM	Kidoek Lee* (Korea Electronics Technology I)*
1113	A Single Panel PV Microinverter Based on Coupled Inductor DC-DC	Pierluigi Guerriero* (University of Naples Federico II)*;marino Coppola (University of Naples Federico II);Pasquale Cennamo (Skytronics s.r.l.);Davide Lauria (University of Naples Federico II); Santolo Daliento (University of Naples Federico II)

N/A	Modelling the Medium Term Deregulated Power Market Based on the Cournot Game Theory	Mohammad Tolou Askari* (Islamic Azad University)*
1118	Adaptive Sliding mode control scheme for a Wave Power Generation Plant	Oscar Barambones* (University of the Basque Count)*; Jose Cortajarena (University of the Basque Country); Jose Gonzalez de Durana (University of the Basque Country); Patxi Alkorta (University of the Basque Country); Isidro Calvo (University of the Basque Country); Jose Ramos (University of the Basque Country)
N/A	Hardware-in-Loop Validation of a Dynamic Control Employed for a DC Microgrid Incorporating High Gain DC-DC Power Stages	Narendra Kumar* (NIT Meghalaya)*; Ramesh Naidu Bonu (NIT Meghalaya); Gayadhar Panda (NIT Meghalaya)
1124	Impact of Transmission Line Mutual Inductance on Transmission Loss/Cost Allocation in Deregulated Electricity Market	Prabhakar Karthikeyan* (VIT University, Tamil Nadu)*; Shafeeque Ahmed K (VIT University)
N/A	Hardware-in-Loop Validation of a Dynamic Control Employed for Hybrid Fuel Cell-Supercapacitor DC System	Ramesh Naidu Bonu* (NIT Meghalaya)*; Gayadhar Panda (NIT Meghalaya); Rangababu Peesapati (NIT Meghalaya)
1128	Application of S Transform for Detection of External Interferences in Online Transformer Impulse Frequency Response Analysis	Bahar Mohseni* (Curtin University)*; Naser Hashemnia (Curtin University); Syed Islam (Curtin University)
N/A	Analysis of Large Scale PV Penetration Impact on IEEE 39-Bus Power System	Affijulla Shaik* (NIT Meghalaya, India)*; Gaurav Bhatt (NIT Meghalaya, India); Rakesh Roy (NIT Meghalaya)
1132	On the vertical illuminance in indoor sport facilities - Innovative measurement procedure to verify international standard requirements in fencing halls	Martina Di Pede (University of Pisa - DESTeC Department); Francesco Leccese (University of Pisa); Giacomo Salvadori* (University Of Pisa - School Of Engineering - Dept Of Energy)*; Enrico Di Ciolo ("Antonio Di Ciolo" Pisa Fencing Club); Simone Piccini ("Antonio Di Ciolo" Pisa Fencing Club)
1138	Better energy management by implementing an energy measurement and monitoring plan	Marie SWIATEK (Evolution Energie); Fabien Imbault* (Evolution Energie)*
1142	The green blockchain	Fabien Imbault* (Evolution Energie)*; Rodolphe De Beaufort (GE Energy Connections); Robert Plana (GE Digital); Marie Swiatek (Evolution Energie)
1147	External costs estimation in a cost-benefit analysis: the new Formia-Gaeta tourist railway line in Italy	Armando Carteni* (Department of Civil, Construct)*; Ilaria Henke (University of Naples)
N/A	Energy monitoring prototype using COTS-IoT device for domestic applications in Smart Grid	Josue Lopez* (CETYS University)*; Miguel Ponce Camacho (CETYS University); Adriana Valle (CETYS University); Luis Basaca-Preciado (CETYS University); Juan Terrazas (CETYS University); Ana Luna (Superior Technical Institute of Cajeme); Victor Ramos (State University of Sonora)
1153	Distinguishing Short Circuit and Normal Operation Currents in DC Urban Light Railway Systems	Enrico Pons* (Politecnico di Torino)*; Pietro Colella (Politecnico di Torino); Roberto Rizzoli (Infra.To); Riccardo Tommasini (Politecnico di Torino)

N/A	Expert System for Selecting of Regions that Requiring Protection Improvement Lightning Against in Distribution Feeders	Marcel Araujo* (University of São Paulo)*
1159	Characteristics of household mobility for Milan: A statistical investigation of underlying determinants	Meng Xu* (Beijing Jiaotong University)*;Lorenzo Mussone (Politecnico di Milano);Susan Grant-Muller ;Leilei Liang
N/A	RBF-Fuzzy Control of a SMES Unit: An effective tool for Enhancing Transient Stability Limit	Mojtaba Babaei (Yadegar-e-Imam Khomeini (RAH) Shahr-e-Rey Branch, Islamic Azad University);Mehrdad Eghlimi* (Shiraz University of Technology)*;jamshid Aghaei (Shiraz University of Technology)
1165	Demonstration of Friendly Interactive Grid Under the Background of Electricity Market Reform in China	Hongxun Hui (Zhejiang University);Xing Jiang (Zhejiang University);Yi Ding* (Zhejiang University - China)*;Yonghua Song (Zhejiang University);Li Guo (State Grid Jiangsu Economic Research Institute)
N/A	Contribution of Electric Vehicles for Frequency Regulation in Presence of Diverse Power Sources and Transmission Links	Sanjoy Debbarma* (NIT Meghalaya)*;Arunima Dutta ;Affijulla Shaik (NIT Meghalaya, India)
1170	Air quality grid to enable energy savings	Saketaram Soussilane (Meo);Maria RESTREPO (Meo);Lyndon Wheeler ;Fabien Imbault* (Evolution Energie)*
1173	Optimal operation of storage systems integrated with MV photovoltaic plants, using Jmodelica	Stefano Barsali (University of Pisa - DESTEC); Romano Giglioli (University of Pisa - DESTEC);Giovanni Lutzemberger* (University of Pisa)*;Davide Poli (University of Pisa - DESTEC);Giacomo Valenti (University of Pisa)
1179	Modelling heat demand in buildings with an experimental approach	Jevgenijs Kozadajevs (Riga Technical University);Zane Broka* (Riga Technical University)*;Antans Sauhats
1183	MV Ground Fault Current Distribution: an Analytical Formulation of the Reduction Factor	Pietro Colella* (Politecnico di Torino)*;Enrico Pons (Politecnico di Torino);Riccardo Tommasini (Politecnico di Torino)
1189	An Advanced Microgrid Simulator for Stand-Alone and Market-Dependent Energy Strategies	Dimitrios Zafirakis* (Technological Educational Inst)*;Georgios Tzanes (Piraeus University of Applied Sciences);John Kaldellis (Piraeus University of Applied Sciences)
1195	Enhancing energy efficiency in railway operation through RCG-based rescheduling	Ambra Toletti (IVT - ETH Zuerich);Valerio De Martinis* (ETH Zurich - Institut fr Verkehrsplanung und Transportsysteme)*;Ulrich Weidmann (IVT - ETH Zuerich)
1201	Impact of Smart Electric Thermal Storage on Distribution Grid	Lubov Petrichenko (Riga Technical University);Zane Broka* (Riga Technical University)*;Antans Sauhats
1207	Selective Harmonic Elimination for a 27-Level Asymmetric Multilevel Converter	Javier Munoz* (Universidad de Talca)*;Ignacio Torres ;Johan Guzman (Universidad de Talca);Carlos Baier ;Pedro Melin ;Jaime Rohten ;Jose Espinoza ;Jose Silva
1212	Mitigation of Power Fluctuation in Variable-Speed Wind Turbine with DFIG	Babak Ganji* (University of kashan)*;Marziye Rashidian (university of kashan);Mohsen Rahimi (university of kashan)
1217	Design Optimization of Switched Reluctance Generator to Maximize Efficiency and Gen-Power Ratio	Babak Ganji* (University of kashan)*;Mahdi Heidarian (university of kashan)
1222	Power Hardware In the Loop simulator of Photovoltaic Plant for smart grid interation analysis	Giambattista Gruosso* (Politecnico di Milano)*;Yujia Huo (Politecnico di Milano); Luigi Piegari (Politecnico di Milano)

1227	Radiated emissions measurements of a portable power bank in a GTEM cell	Beata Palczynska* (Gdynia Maritime University)*
1233	Aggregation of Small Loads for Demand Response Programs- Implementation and Challenges: a Review	Amin Rajabi* (University of Technology,Sydne)*;Li Li (University of Technology, Sydney);Jiangfeng Zhang (University of Technology, Sydney);Jiangou Zhu (University of Technology, Sydney)
N/A	MVT Controlled Voltage Restorer for Fault-Ride Through Capability	Mustafa İnci* (Çukurova University)*;Mehmet BUYUK (Çukurova University);Adnan Tan (Çukurova University);Kamil Bayındır (Yıldırım Beyazıt University);Mehmet Tümay (Çukurova University)
1239	District Heating Demand Short-Term Forecasting	Roman Petrichenko* (Riga Technical University)*;Karlis Baltputnis (Riga Technical University);Antans Sauhats ;Dmitry Sobolevsky (Riga Technical university)
1244	Saving environmental impact of electrical energy transmission by employing existing/planned transport corridors	Sebastian Dambone sessa* (University of Padova)*;Roberto Benato (University of Padova); Massimo Rebolini (TERNA);Luca Guizzo (Terna)
1250	Analysis of entering flows in the congestion pricing Area C of Milan	Lorenzo Mussone* (Politecnico di Milano)*
N/A	Modeling and Control of a Bidirectional Power Converter Based on Neutral-Point Clamped Topology for Grid Interface of DC Microgrid Systems	Hans Sathler* (UFMG)*;Lara Sathler (UFMG);Thiago Oliveira (UFMG);Pedro Garcia (UFMG)
1256	Evaluation of Lightning-Induced Overvoltages on a Distribution System: Validation of a Dedicated Code using Experimental Results on a Reduced-Scale Model	Daniele Mestriner* (Genoa University)*; Massimo Brignone (University of Genova,Department of Naval, Electrical, and ICT Engineering);Renato Procopio (University of Genova);Erica Ginnante (University of Genova);Ilaria Ruggi (University of Genova); Farhad Rachidi (Swiss Federal Institute of Technology (EPFL));Alexandre Piantini
1262	A study of oil impregnated pressboard insulation based on ester fluids for an application in HVDC insulation system	Patrick Rumpelt* (University Dortmund)*;frank Jenau
1266	The EBSF_2 innovative predictive maintenance system for buses	Maria Vittoria Corazza* (Sapienza University of Rome)*;daniela Vasari (Pluserice);Silvia Magnalardo (Pluserice);Enrico Petracci (Pluserice);michele Tozzi (UITP)
1272	Enhancing the Performance of WiNPLC Smart Grid Communications by MIMO NB-PLC	Sadaf Moaveninejad* (Politecnico di Milano)*;Ahmad Saad (Fraunhofer ESK);Maurizio Magarini (Polimi)
N/A	Progress Towards Intelligent Transmission Lines based on the Monitoring and Measurements of Electromagnetic Transient	Ke Wang (Yunnan Electric Power Research Institute);Hongwen Liu (Yun);Hao Li (Yunnan Electric Power Research Institute);Junhui Zhao* (University of New Haven)*
1278	Space debris science at the Satellite Laser Ranging Station Graz	Michael Steindorfer* (Space Research Institute, Graz)*;Georg Kirchner ;Franz Koidl ;Peiyuan Wang ;Daniel Kucharski
1283	The influence of shading in terms of the energy performance of photovoltaic panels in Romanian climate conditions	Alexandra Danu (Ministry of Energy);Adrian Badea (Academy of Romanian Scientists); Vladimir Tanasiev* (University Politehnica of Bucharest, Faculty of Energetics)*;Roxana Patrascu ;Eduard Minciuc

1287	SCORBOT-ER III Robotic Arm Detection and Control with Color Recognition with the Possibility for Using in Sun Tracker Applications	Roland Szabo* (Politehnica Univ. Timisoara)*;Aurel Gontean (Politehnica University Timisoara)
1293	Earth Resistance Measurements in Urban Contexts: Problems and Possible Solutions	Pietro Colella* (Politecnico di Torino)*;Enrico Pons (Politecnico di Torino);Riccardo Tommasini (Politecnico di Torino);Eleonora Riva Sanseverino (DEIM University of Palermo); Maria Luisa Di Silvestre (University of Palermo);Gaetano Zizzo (DEIM University of Palermo)
1299	Sun Tracker Robotic Arm Optical Distance Measuring Algorithm Evaluation Using Six Sigma Methods	Roland Szabo* (Politehnica Univ. Timisoara)*;Aurel Gontean (Politehnica University Timisoara)
1305	On-demand dynamic bi-/multi-modal ride-sharing using optimal passenger-vehicle assignments	Tai-Yu Ma* (LISER)*
1310	Local energy planning: potential and perspectives of transport sector in Sustainable Energy Action Plans (SEAPs) of four small Italian islands	Daniele Bruschi (Sapienza University of Rome);Saverio Berghi* (Università di Roma La Sapienza)*
N/A	A Monitoring Framework for Sustainable Integrated Coastal Zone Management Initiatives: the Case for Mauritius	Yashna Beeharry* (UTM)*;Chandradeo Bokhoree (UTM);Girish Bekaroo (Middlesex University);Michael Phillips (uwtsd)
1315	The Pedestrian's Perspective: how do illuminance variations affect reassurance?	Benedetta Mattoni* (Sapienza Universit di Roma)*; Chiara Burattini (Sapienza University);Fabio Bisegna (Universita degli studi di Roma Sapienza);Steve Fotios
1320	Optimization of the Coupling Factor Curve for Lateral Offset of a Coil Pair for Contactless Inductive Charging to Generate Positioning Tolerance	Mike Böttigheimer* (Universtität Stuttgart)*;Nejila Parspour (Institut für Elektrische Energiewandlung - Universität Stuttgart);Michael Armbruster (Institut für Elektrische Energiewandlung - Universität Stuttgart)
1328	Technical Issues of Solar- and Gas Engine Based MicroGrids	Balint Gyorvari* (Budapest University of Technology and Economics)*;Istvan Vokony (Budapest University of Technology and Economics)
1334	Overall performance of a surge protection device system in protecting equipment against lightning surges	Tomasz Kisielewicz* (Warsaw University of Technology)*; Giovanbattista Lo Piparo (La Sapienza University of Roma); Carlo Mazzetti (La Sapienza University of Roma)
1339	Extrapolation of varistor's watt loss energy using Arrhenius life model	Pitshou Bokoro* (University of Johannesburg)*
1343	Microstructure observation of Zinc oxide exposed to thermal and ac field stresses	Pitshou Bokoro* (University of Johannesburg)*
1347	Cam-Wallet: Fingerprint-Based Authentication in M-Wallets Using Embedded Cameras	Stanley Okpara (Middlesex University (Mauritius Branch Campus));Girish Bekaroo* (Middlesex University)*
1352	Metering for Energy Management - A Practical Approach to Metering	Kris Szajdzicki* (ND Metering / ESTA)*
1357	A Stability-oriented Design Method for Virtual Impedance Loop in Droop-controlled Converters	Alberto Bolzoni* (Politecnico di Milano)*;Roberto Perini ;Luisa Frosio (Electro Power Systems)

1363	Measuring & Maintaining Energy Efficiency - SMART approach to Implementing ISO 50001	Kris Szajdzicki* (ND Metering / ESTA)*
1368	Modified Droop Control for the Optimal Management of the Battery Systems in Isolated Microgrids	Roberto Perini ;Luisa Frosio* (Electro Power Systems)*;Gabriele Marchegiani (Electro Power Systems);Alberto Bolzoni (Politecnico di Milano)
1374	Multivariable Automatic Compensation Method for Inductive Power Transfer System	Rodrigo Porto* (UFRGS)*;Lucas Murliky (UFRGS);Gustavo Oliveira (UFRGS);Valner Brusamarello (UFRGS)
1380	Inrush and Fault Current Discrimination Using Wavelet Transform and Autoregressive Modeling	Pooria Norouzi* (Istanbul Technical University)*;Negar Dashti (university)
1387	Temperature Control of an Innovative Aluminium-Steel Molds Induction Preheat Process Placed on Automated Laser Guided Vehicles	Mariosario Prist* (Univpm)*;Paolo Cicconi (Università Politecnica delle Marche);Francesco Ferracuti (Università Politecnica delle Marche);Anna Costanza Russo (Università Politecnica delle Marche);Andrea Monteriù (Università Politecnica delle Marche);Emanuele Pallotta (Università Politecnica delle Marche);Sauro Longhi (Università Politecnica delle Marche)
1392	Optimal sizing of a hybrid mini-grid considering the fuel procurement and a rolling horizon system operation	Davide Fioriti* (DESTEC)*; Romano Giglioli (University of Pisa - DESTEC);Davide Poli (University of Pisa - DESTEC);Giovanni Lutzemberger (University of Pisa);Andrea Vanni (Enel Green Power S.p.A.);Pasquale Salza (Enel Green Power S.p.A.)
N/A	VPP Distributed Energy Management Mechanism in Hybrid Energy Internet	Jie Yu* (Southeast University)*
1398	Demand Response from Multiple-Energy Customers in Integrated Energy System	Changzheng Shao* (Zhejiang University)*;Yi Ding (Zhejiang University - China);Chengzhi Zhu ;Yonghua Song (Zhejiang University)
1404	Classification and Management of Electricity Market Customer Considering Demand Response in China	Peng Wang (North China Electric Power University);Pengyu Zhang* (North China Electric Power University)*
1409	Detection of Non-Technical Losses using Advanced Metering Infrastructure and Deep Recurrent Neural Networks	Soham Chatterjee* (SRM University)*;Rohit Saha (SRM University);Archana Iyer (SRM University);Raghav Gupta (SRM University);Fenil Doshi (SRM University);Karthik Suresh (SRM University)
1415	Optimal day-ahead and intra-day scheduling of energy and operating reserve considering fluctuating wind power	Xinhong You* (Zhejiang University)*;Yi Ding (Zhejiang University - China);Jun Zhang (State Grid Zhejiang Electric Power Company);Huahua Wu (State Grid Zhejiang Electric Power Company);Pierluigi Siano (University of Salerno);Shanhong Jin
1421	Reliability Assessment of UHVDC Transmission System Based on Bipole Symmetry	Xing Jiang* (Zhejiang University)*;Huahua Wu (State Grid Zhejiang Electric Power Company);Jun Zhang (State Grid Zhejiang Electric Power Company);Yi Ding (Zhejiang University - China);Yonghua Song (Zhejiang University);Pierluigi Siano (University of Salerno)
1427	Fuzzy Logic Based Inertial Dispatch Strategy from Wind Power Plant	Santanu Paul* (IIT Bombay)*;Zakir Rather
1433	Feasibility Analysis of Storage Systems in Wind Plants - an Italian Application	Sonia Leva* (Politecnico di Milano)*;Enrico Casalini (Politecnico di Milano)

1439	Using ARDUINO development platform in the diagnosis of AC electrical machines	Fabrice Morganti* (LSEE)*;Mohamed Younsi (LSEE);Mauricio Cuevas Salvatierra (LSEE);Jean-Philippe Lecoïnte (LSEE);Thierry Jacq (EDF)
1445	Instantaneous conduction and switching losses in two-level voltage source inverters	Mahdi Fakharmanesh* (Politecnico di Milano)*;Christoph Hackl (Technische Universität München);Roberto Perini
1451	Exploring the daylight simulation of filter panels in a pre-tunnel structure	Dionysia Drakou* (Sapienza University)*; Chiara Burattini (Sapienza University);Alessandro Mangione (Sapienza);Fabio Bisegna (Universita degli studi di Roma Sapienza)
1456	Influence of Rotor Slot Shape on the Parameters on Induction Motor	Stanislav Rusnok* (Siemens, s.r.o.)*;Ondřej Orság (Siemens AG);Pavel Sobota (Siemens, s.r.o.); Petr Kaor (VSB Technical University of Ostrava)
N/A	Blue-light retinal hazard and LED lamps: proposal of a methodology for risk assessment according to ICNIRP guidelines	Alessandro Polichetti (ISS);Massimo Borra* (INAIL)*;andrea Militello (INAIL);Fabio Bisegna (Universita degli studi di Roma Sapienza)
N/A	Clocks Synchronization Mechanism for Radio Interferometer Network	El Houssain AIT MANSOUR* (Station de Radioastronomie de)*;Karl-Ludwig Klein (Observatoire de Meudon);Bruno Da Silva (Station de Radioastronomie de Nançay);Stéphane Bosse (Station de Radioastronomie de Nançay)
1462	Voltage stabilization and efficiency improvements on DC railways by stand alone Energy Storage Systems	Alessio Clerici* (Politecnico di Milano)*; Enrico Tironi (Politecnico di Milano);Francesco Castelli Dezza (Politecnico di Milano)
N/A	Control of Wind Turbine by LPV Gain Scheduling with Tower Load Reduction	Mourad Djamaï* (USTHB)*
1469	Improving the Stability of SEIG Based Microgrids during Overloads by Using Supercapacitor-Based Storage and Load-shedding	Catalin Ion* (Transilvania University of Bra)*;Ioan Serban (Transilvania University of Brasov)
1475	Influence of humidity on pulse shape parameters of positive corona discharges in air at DC voltage	Ulrich Lühring* (TU Dortmund University)*;Daniel Wienold (TU Dortmund University);Frank Jenau (TU Dortmund University)
1480	Cool façade optimization: a new parametric methodology for the urban heat island phenomenon (UHI).	Ernesto Cesario* (UNICAM)*;Roberta Cocci Grifoni (University of Camerino);Graziano Marchesani ;Simone Tascini (University of Camerino)
N/A	IEC EN 60825-1 3th edition vs 2th edition: different classification due to maximum angular subtense and removal of measuring condition 2.	Alessandra Tomaselli* (University of Pavia, Italy)*;Dante Milani (University Of Pavia)
1485	Inspired by the atmosphere. A procedural protocol that defines a meta-project based on atmospheric forces: solar radiation and wind field	Graziano Marchesani* (UNICAM-University of Camerino)*;Marco Rosa (UNICAM-University of Camerino);Roberta Cocci Grifoni (University of Camerino);Mariano Pierantozzi (University of Camerino)
1490	An Active Railway Power Quality Compensator for 2x25kV High-Speed Railway Lines	Hamed Jafari Kaleybar* (Sahand University of Technolog)*;Hossein Madadi Kojabadi (Sahand University of Technology);Morris Brenna (Politecnico di Milano);Federica Foadelli (Politecnico di Milano);Seyed Saeed Fazel

1496	Two-switch forward converter efficiency optimization	Jan Martis* (Brno University of Technology)*;Pavel Vorel (BUT);Jan Knobloch (Brno University of Technology)
1501	Impact of Customers Flexibility in Heat Pumps Scheduling for Demand Side Management	Marco Pau* (RWTH Aachen University)*;Jochen Cremer ; Ferdinanda Ponci (RWTH Aachen); Antonello Monti (RWTH Aachen)
1507	Replacing diesel generators with hybrid renewable power plants: Giannutri Smart Island project	Francesco Palone* (TERNA)*;pierluigi Portoghese (TERNA);Luca Buono (TERNA); Andrea Necci (TERNA);Daniele Rosati (Electro Power Systems);Claudio Rosati (Electro Power Systems)
1513	A compensation method for an optical direct current sensor using ripple	Florian Leßmann* (TU Dortmund)*;Lars Vogelsang (TU Dortmund);frank Jenau
1519	Analysis of the performances of a fully 4H-SiC insulated DC/AC converters	Luigi Di Benedetto* (University of Salerno)*;Gian Domenico Licciardo (University of Salerno);Alfredo Rubino (University of Salerno);Emilio Lanzotti (Ansaldo STS);Eduardo Piccirilli (Ansaldo STS)
1523	Losses of 4H-SiC DMOFET in high voltage power converters	Luigi Di Benedetto* (University of Salerno)*;Gian Domenico Licciardo (University of Salerno)
1527	Optimal matching between optical rectennas and harvester circuits	Chiara Di Garbo* (University of Palermo)*;Patrizia Livreri (University of Palermo);Gianpaolo Vitale (CNR-ISSIA)
1533	A non-solid-earthed distribution fault location method based on unbalanced capacitance injection	Zili YIN ;Wei Zhang* *;Yuxing Chen ;Wenying HUANG ;Jichang LI
1539	On the potential of Simulation enhanced Conservation of CH Artifacts	Evdoxia Taka (CERTH-ITI);Konstantinos Papachristou (CERTH-ITI);Nikolaos Dimitriou (CERTH/ITI);Anastasios Drosou* (CERTH-ITI)*;Dimitrios Tzouvaras (CERTH-ITI)
N/A	The establishment of energy storage model and its application in secondary frequency regulation of air conditioning load	Yu Long ;Qi Zhou ;Ciwei Gao* (Southeast University)*;lingling Sun ;Jie Yu ;Yu Liao ;Junqi Liu
1545	Risk-Based Self-Scheduling of Gencos in Smart Grids considering a New Method for Bilateral Contracts	Miadreza Shafie-khah* (UBI)*;Gerardo Osório (CMAST, Univ. of Beira Interior);Desta Zahlay Fitiwi (C-MAST/UBI);João P.S. Catalão (Faculty of Engineering of the University of Porto);Pierluigi Siano (University of Salerno)
1550	Full Digital Architecture for Selective Protection Coordination in Low Voltage Electrical Installations	Enrico Ragaini* (ABB)*;Antonio Fidigatti ;Massimo Belometti ;Paolo Bettinelli
N/A	Improving geometric configurations and level of service of intersections under low-volume conditions	Francesca Russo* (University of NaplesFedericoll)*;Salvatore Antonio Bianco (University of NaplesFedericoll)
1554	Multiphase WPT-System based on phase shifted resonant topologies	Faical Turki* (Vahle GmbH & Co.KG)*;Marc Detweiler
1560	Dynamic Reconfiguration of Distribution Network Systems: A Key Flexibility Option for RES Integration	Flávio Dantas (University of Porto);Desta Fitiwi* (University of Beira Interior)*;Sérgio Santos (University of Beira Interior);João P.S. Catalão (Faculty of Engineering of the University of Porto)
1566	Managing RES Uncertainty and Stability Issues in Distribution Systems via Energy Storage Systems and Switchable Reactive Power Sources	Mário Pereira (University of Porto);Desta Fitiwi* (University of Beira Interior)*;Sérgio Santos (University of Beira Interior);João P.S. Catalão (Faculty of Engineering of the University of Porto)

1572	Optimizing DISCOs planning for networks with distributed energy resources	George Cristian Lazaroiu* (University POLITEHNICA of Bucharest)*;Virgil Dumbrava (University POLITEHNICA of Bucharest);Mihnea Costoiu (University POLITEHNICA of Bucharest);Catalina Alexandra Sima (University POLITEHNICA of Bucharest);Sonia Leva (Politecnico di Milano)
1578	Analysing Grid Impact of Voltage Fluctuations from Multiple Sources with/without STATCOM	George Cristian Lazaroiu* (University POLITEHNICA of Bucharest)*;nicolae Golovanov (University POLITEHNICA of Bucharest);Luminita Elefterescu ;Mariacristina Roscia (Universita di Bergamo); Dario Zaninelli (Politecnico di Milano)
1584	A mobile computed tomography system for on site cultural heritage analysis	Matteo Bettuzzi* (University Of Bologna)*;Maria Morigi (University Of Bologna);Rosa Brancaccio (Univeristy Of Bologna);Franco Casali (Centro Fermi Roma);Eva Peccenini (Centro Fermi Roma)
1590	Optimal Scheduling Strategy in Insular Grids Considering Significant Share of Renewables	Marcos Silva (Faculty of Engineering of Univeristy of Porto, Porto, Portugal.);Gerardo Osório* (CMAST, Univ. of Beira Interior)*;Miadreza Shafie-khah (UBI);Juan Lujano-Rojas (Inesc-ID, Instituto Superior Técnico, Univ. of Lisbon, Lisbon, Portugal);João Catalão (Faculty of Engineering of Univeristy of Porto, Porto, Portugal.)
1595	Optimal Demand Response Scheme for Power Systems Including Renewable Energy Resources Considering System Reliability and Air Pollution	Marta Ribeiro (Faculty of Engineering of Univeristy of Porto, Porto, Portugal.);Miadreza Shafie-khah (UBI);Gerardo Osório* (CMAST, Univ. of Beira Interior)*;Neda Hajibandeh (CMAST, University of Beira Interior, Covilha, Portugal);João Catalão (Faculty of Engineering of Univeristy of Porto, Porto, Portugal.)
1601	A New Approach for Market Power Detection in Renewable-based Electricity Markets	Neda Hajibandeh (CMAST, University of Beira Interior, Covilha, Portugal);Miadreza Shafie-khah* (UBI)*;Gerardo Osório (CMAST, Univ. of Beira Interior);João P.S. Catalão (Faculty of Engineering of the University of Porto)
1606	Optimal Bidding Strategy of Responsive Demands in a New Decentralized Market-Based Scheme	Tiago Garcia (Faculty of Engineering of Univeristy of Porto, Porto, Portugal.);Miadreza Shafie-khah (UBI);Gerardo Osório* (CMAST, Univ. of Beira Interior)*;João Catalão (Faculty of Engineering of Univeristy of Porto, Porto, Portugal.)
1611	Modeling Price- and Incentive-Based Demand Response Strategies in the Renewable-based Energy Markets	Neda Hajibandeh (CMAST, University of Beira Interior, Covilha, Portugal);Mehdi Ehsan (Dept. Electrical & Computer Eng. Science and Research Branch);Soodabeh Soleymani (Dept. Electrical & Computer Eng. Science and Research Branch);Miadreza Shafie-khah* (UBI)*;João P.S. Catalão (Faculty of Engineering of the University of Porto)
1616	Electrochemical energy storage mitigating impact of electric vehicle on the electric grid: two Italian case studies.	Marco Ferraro (CNR-ITAE);Marco Beccali* (Università di Palermo)*;Vincenzo Antonucci (CNR-ITAE);Laura Andaloro (CNR-ITAE);Francesco Sergi (CNR-ITAE);Valerio Lo Brano (University of Palermo);Giuseppe Napoli (CNR-ITAE);Giorgio Dispenza (CNR-ITAE);Giovanni Brunaccini (CNR-ITAE);Salvatore Micari (CNR-ITAE);Davide Aloisio (CNR-ITAE);Samuele Di Novo (CNR-ITAE);Nico Randazzo (CNR-ITAE);maurizio Cellura (Università di Palermo)
1621	Game Theory and Competitive Aspects in Electricity Markets	George Cristian Lazaroiu* (University POLITEHNICA of Bucharest)*;Virgil Dumbrava (University POLITEHNICA of Bucharest);Mihnea Costoiu (University POLITEHNICA of Bucharest);Mariacristina Roscia (Universita di Bergamo)

1627	Economic Analysis on the Use of Wired and Wireless Recharging Systems	Vincenzo Di Dio* (University of Palermo)*;Giovanni Cipriani (University of Palermo);Rosario Miceli (University of Palermo);Michela Longo (Politecnico di Milano); Dario Zaninelli (Politecnico di Milano)
1633	Optimal parameter estimation of battery model for pivotal automotive battery management system	Akshay Rathore* (Concordia University, Canada)*;Rajesh Kumar (MNIT Jaipur, India);Venu Sangwan (MNIT Jaipur, India)
1639	Evaluation of losses in a bidirectional wireless power transfer system for Electric Vehicles	Alicia Trivino* (University of Malaga)*;José González-González (University of Málaga);José A. Aguado Sánchez (Universidad de Málaga)
1644	Energy measurement for telecommunication operators : the Vodafone use case	Eric Estrade (Vodafone);Fabien Imbault* (Evolution Energie)*
1648	Stochastic LCOE in portfolio selection of electricity generation	Jerzy Dzieża* (Applied Mathematics)*
1653	A Hybrid Switching VSC Converter for Reactive Power Compensation in Utility Grid	Akshay Rathore* (Concordia University, Canada)*;Amitkumar K.S. (Concordia University, Montreal, Canada);Mahmud Bijan (Concordia University, Montreal, Canada);Tamanwe Payarou (Concordia University, Montreal, Canada);Navjot Singh (Concordia University, Montreal, Canada);Pragasen Pillay (Concordia University, Montreal, Canada)
1657	A Novel Topology For Single Phase Active PFC Circuit	Hussein Al-bayaty* (Plymouth)*;Ali Al-Omari (University of Plymouth);Marcel Ambroze (Plymouth university);Dr. Mohammed Ahmed (University of Plymouth)
1663	Analysis of Noise in In-home Channels for Narrowband Power Line Communications	Mauro Tucci* (University of Pisa)*;Li Bai (University of Pisa); Marco Raugi (DESTEC - University of Pisa);Sami Barmada (DESTEC, University of Pisa);Tao Zheng (Xi'an Jiaotong University)
1669	Optimizing Droop Coefficients for Minimum Cost Operation of Islanded Micro-grids	Gaetano Zizzo* (Universit degli Studi di Palermo)*;Eleonora Riva Sanseverino (DEIM University of Palermo); Maria Luisa Di Silvestre (University of Palermo);Binh Van (Institute of Energy Science (IES) Vietnam Academy of Science and Technology);Ninh Quang (Institute of Energy Science (IES) Vietnam Academy of Science and Technology); Josep M. Guerrero (University of Aalborg);Quynh Tran (University of Palermo)
1675	A Two-Phase Three-Wire Quasi-Z-Source based Railway Power Quality Compensator for AC Rail Networks	Hamed Jafari Kaleybar* (Sahand University of Technolog)*;Hossein Madadi Kojabadi (Sahand University of Technolog);Morris Brenna (Politecnico di Milano);Federica Foadelli (Politecnico di Milano);Seyed Saeed Fazel
N/A	Influence of the soil resistivity uncertainty on BFR computation	Maria Teresa Correia de Barros* (IST-Universidade de Lisboa)*;Margarida Simões Alves (Labelec-Energias de Portugal)
1681	A Distributed Approach for DG Integration and Power Quality Management in Railway Power Systems	Weijie Pan* (University of Florida)*; Arturo S. Bretas (University of Florida);Surya Dhulipala (University of Florida)
1687	Evaluation of the Effect of Wind Farms with Doubly-Fed Induction Generators on Steady State Voltage	Yaser Bigonah Burki ;Naser Nourani Esfetanaj ;Milad Gheydi* (1Young Researchers and Elites)*;Mehrdad Mostafavi ;Payam Farhadi
1693	Comparative Study of Conventional SVPWM Algorithms in terms of Producing Harmonics and the Effect of the Harmonics on Induction Motor	Milad Gheydi* (1Young Researchers and Elites)*;Payam Farhadi ;Farshid Abdolahnejad Baroogh

N/A	Induced Pipeline Voltage Near-by Hybrid Transmission Lines	Mohamed Samy* (Beni-Suef University)*;Ahmed Emam (Cairo University)
1698	Optimizing Line Power flows by Shunt Capacitor Placement using Synchrophasor Technology	Samiya Zafar* (NED University of Engineering)*;Muhammad Ali Memon (NED University of Engineering and Technology)
1702	Optimizing Line Power Flows by Series Capacitor Placement	Samiya Zafar* (NED University of Engineering)*;Muhammad Ali Memon (NED University of Engineering and Technology)
1707	Sapienza Smart Campus - From the matrix approach to the applicative analysis of an optimized garbage collection system	Francesca Pagliaro* (Sapienza Universit di Roma)*; Benedetta Mattoni (Sapienza Universit di Roma); Fabio Nardecchia (Sapienza);Vito Ponzo (Sapienza);Giulio Corona (Sapienza);Fabio Bisegna (Universita degli studi di Roma Sapienza);Franco Gugliermetti (Sapienza University)
1712	A quantitative evaluation of the mutual influences among Smart strategies applied at district level	Benedetta Mattoni* (Sapienza Universit di Roma)*; Fabio Nardecchia (Sapienza);Alessio Benelli ;Stefano Buscaglione ; Francesca Pagliaro (Sapienza Universit di Roma); Chiara Burattini (Sapienza University)
1717	Matching macro- and micro-scopic approaches for the evaluation of traffic management impacts	Stefano De Luca (University of Salerno);Roberta Di Pace (University of Salerno);Silvio Memoli (University of Salerno);Luigi Pariota* (University of Naples)*
1723	Study of energy performance and analysis of possible retrofit strategies in a public school building in Rome	Andrea Vallati* (Università degli Studi di Roma "Sapienza")*;Stefano Grignaffini (Università degli Studi di Roma "Sapienza");Marco Romagna (Università degli Studi di Roma "Sapienza");Luca Mauri (Università degli Studi di Roma)
1728	The Use of the Analytic Hierarchy Process method for supporting urban road regeneration actions: the case study of Naples	SILVIO MEMOLI* (MUNICIPALITY OF NAPLES)*;Mario Calabrese (Municipality of Naples);Pasquale Di Pace (Municipality of Naples);Nicola Pascale (Municipality of Naples);Stefano De Luca (University of Salerno)
1734	Lighting of Recreation Grounds as a Source of Sky Glow - the influence of Luminaire Type on this Phenomenon	Irena Fryc (Bialystok University of Technology);Fabio Bisegna* (Universita degli studi di Roma Sapienza)*;Przemysław Tabaka (Lodz University of Technology)
1738	Integrated control strategy for islanded operation in Smart Grids: virtual inertia and ancillary services	Simone Negri* (Politecnico di Milano)*; Enrico Tironi (Politecnico di Milano);Davide Sala Danna
1744	Assessment of e-vehicles availability in charging pool for support services in Smart Grids. Case study based on real data	Erik Blasius (BTU Cottbus-Sebftenberg);Erik Federau ; Przemyslaw Janik (Wroclaw University of Technology);Zbigniew Leonowicz* (Wroclaw University of Science and Technology)*
1750	Sensitivity analysis of sampling and clustering techniques in expansion planning models	Martin Kristiansen* (NTNU)*;Philipp Härtel (Fraunhofer IWES);Magnus Korpås (Norwegian University of Science and Technology)
1756	Coordinated Control for the Integration of a Large Scale Electric Vehicle Park with PV into the MV Grid	Osama Mohammed* (Florida International University)*;Abla Hariri (Florida International University);Hassan Eldeeb (Florida International University)
1762	Deployment of Electric Vehicles in an Adaptive Protection Technique for Riding through Cyber Attack Threats in Microgrids	Osama Mohammed* (Florida International University)*;Hany Habib (Florida International University); Ahmed Elsayed (Florida International University);Abla Hariri (Florida International University)

1768	Installation, Commissioning and Acceptance Tests of the Switching Network Units for the Central Solenoids of JT-60SA	Filippo Burini (OCEM); Giuseppe Taddia* (OCEM Energy Technology)*;Sandro Tenconi (OCEM);Makoto Matsukawa (QST);katsuhiko Shimada (QST); Luca Novello (F4E);Antti Jokinen (F4E);Alessandro Lampasi (ENEA Frascati)
1774	An improvement of modified transmission line models of lightning strokes	Vesna Javor* (University of Nis)*
1779	Contracted Generation Verification in Hydro-dominated Electricity Markets	Fu Chen* (Dalian university of technology)*;Rui Cao ;Chuntian Cheng ;Gang Li ;Xiufeng Li
1785	Economic Analysis of Net Metering Regulations for Residential Consumers in Pakistan	Waqas Ur Rehman ; Intisar Ali Sajjad* (Electrical Engineering Department, University of Engineering and Technology, Taxila)*;Dr. Tahir Nadeem Malik (University of Engineering & Technology, Taxila, Pakistan);Luigi Martirano (University of Rome Sapienza); Matteo Manganelli (DIAEE - University of Rome Sapienza)
1791	Impedance Estimation of FEA's Grid in Fiji Islands by V-I Measurement by Using the Synchronous Reference Frame-PLL	Gianpaolo Vitale* (CNR-ISSIA)*;Maurizio Cirrincione (School of Engineering and Physics The University of the South Pacific);F. M. Rabiul Islam (School of Engineering and Physics The University of the South Pacific);Paolo Nogaara (University of Palermo)
N/A	Analytical Models of EMI Sources for Power Electronic Converters	Achour Ales* (Ecole Militaire Polytechnique / Polytechnic institut of Grenoble)*
1797	Environmentally Committed Short-Term Planning of Electrical Distribution Systems Considering Renewable Based DG Siting and Sizing	Ozy Daniel Melgar Dominguez (UNESP);Mahdi Pourakbari Kasmaei* (UNESP, UCLM)*;Marina Lavorato ;Jose Sanches Mantovani (Universidade Estadual Paulista)
1803	Contribution of radar meteor scatter technology to NEO and ozone layer monitoring	Claudio Paris* (Museo Storico della Fisica e Centro Studi e Ricerche Enrico Fermi)*;Vincenzo Gagliarducci ;Antonio Gerardi (Osservatorio Astronomico di Gorga)
1809	Inductive Power Transfer: through a Bondgraph Analogy, an Innovative modal Approach	Alberto Reatti* (University of Florence)*;Fabio Corti ;Luca Pugi (University of Florence);Rosa Mastromauro (University of Florence)
1815	Self-adaptive Protection Strategies for Distribution System with DGs and FCLs Based on Data Mining and Neural Network	WENJUN TANG* (Research Center for Energy Tec)*;Hong-Tzer Yang (Research Center for Energy Technology and Strategy, Department of Electrical En)
1820	Time Series Analysis Techniques Applied to Transportation Noise	Claudio Guarnaccia* (University of Salerno)*;Luigi Elia ;Joseph Quartieri (University of Salerno);Carmine Tepedino (University of Salerno)
1826	An Improved PSO Algorithm for High Accurate Parameter Identification of PV Model	Lili Gong (Southeast university);Wu Cao* *;jianfeng Zhao
1831	Planning of low-voltage distribution systems with uncertainty on load demand in urban areas	Vannak VAI* (Grenoble-INP)*;Egor Gladkikh (Grenoble Institute of Technology (Grenoble-INP));Long BUN (Institute of Technology of Cambodia (ITC));Marie-Cecile ALVAREZ-HERAULT ;Bertrand RAISON
1837	BUSSARD – The High Current High Bandwidth Multiple-Phases Inverter for ASDEX Upgrade	Markus Teschke* (MP Institute f. Plasma Physics)*;Wolfgang Suttrop (MP Institute f. Plasma Physics);Nils Arden (MP Institute f. Plasma Physics);Michael Rott (MP Institute f. Plasma Physics);Horst Eixenberger (MP Institute f. Plasma Physics);Michael Schandrul (MP Institute f. Plasma Physics)

1843	State Estimation of Active Distribution System Based on the Factor Graph Analysis and Belief Propagation Algorithm	Chenhui Yin* (China Agricultural University)*
1849	Statistical analysis of Lithium-ion batteries using SystemC-WMS	Simone Orcioni* (Universit Politecnica delle Marche)*;Adriana Ricci (Universit Politecnica delle Marche);Luca Buccolini (Univ. Politecnica delle Marche);Massimo Conti (Univ. Politecnica delle Marche)
1856	Distortion Analysis and Equivalent Impedance Estimation of a Class-D Full-Wave Rectifier	Alberto Reatti* (University of Florence)*;Fabio Corti ;Maria Cristina Piccirilli (DINFO - UNIFI); Marian Kazimierczuk (Electrical Engineering - Wright State University);Aghasthya Ayachit (Wright State University);Andrea Nepote ;Piero De La Pierre
1863	Experimental Validation of a Thirteen Level H-Bridge Photovoltaic Inverter Configuration	Sandra Dudley* (London South Bank University)*;Terence Quinlan (University of Essex);Stuart Walker (University of Essex);Robert Brown (London South Bank University);AbdelHamid Loukriz (London SOuth Bank University)
1868	Short-Circuit Analysis in Three-Phase Quasi-Z-source Inverter	Mokhtar Yaghoubi* (Amirkabir university of technology)*;Javad Shokrollahi Moghani (Amirkabir University of Technology);Negar Noroozi ; Mohammad Reza Zolghadri (Sharif University of Technology)
1873	Coordinated Distribution Network Reconfiguration and Distributed Generation Allocation via Genetic Algorithm	Marco Cruz (UBI);Sérgio Santos (University of Beira Interior);Desta Fitiwi* (University of Beira Interior)*;João P.S. Catalão (Faculty of Engineering of the University of Porto)
1879	Improved Wind Energy Production Prediction for Remote Aegean Sea Islands	John Kaldellis* (Piraeus University of Applied Sciences)*;Dimitrios Zafirakis (Technological Educational Inst);Emilia Kondili (Technological Educational Institute of Piraeus (TEIP) - Soft Energy Applications)
1885	Coordination of Directional Overcurrent Relays that Uses an Ant Colony Optimization Algorithm for Mixed-variable Optimization Problems	Angel Labrador Rivas* (State University of Londrina)*;Luis Gallego Pareja
1891	Condition Monitoring of Circuit Breakers: Current Status and Future Trends	Behnam Feizifar* (Istanbul Technical University)*;Omer Usta (Istanbul Technical University)
1896	Energy Theft and Defective Meters Detection in AMI Using Linear Regression	Sook Chin Yip* (Multimedia University)*;Chia Kwang Tan (Um Power Energy Dedicated Advanced Centre (UMPEDAC), University of Malaya);Wooi Nee Tan (MMU);Ming Tao Gan (MMU);Ab Halim Bin Abu Bakar (Um Power Energy Dedicated Advanced Centre (UMPEDAC), University of Malaya)
1902	Improving the hosting capacity of photovoltaic distributed generators in low voltage distribution systems by using demand response	Saulo Moreira* (UNESP - BR)*;Dionízio Paschoareli (UNESP - Ilha Solteira);Nadya Kalache (UFMS)
N/A	Fault Location in Medium Voltage DC Shipboard Power Systems	KARTHIKEYAN MURUGESAN* (VELAMMAL ENGINEERING COLLEGE)*;Rengaraj Ramasubbu (SSN College of Engineering, India)
1908	Design Approaches for EHV OHL "Compact" Tower Grounding Systems	Marco Maccioni* ("Sapienza" University of Rome)*; Fabio Massimo Gatta ("Sapienza" University of Rome); Alberto Geri ("Sapienza" University of Rome); Stefano Lauria ("Sapienza" University of Rome; Francesco Palone (TERNA);Giuseppe Pelliccione (Terna)

1914	Replacing diesel generators with hybrid renewable power plants: Giglio Smart Island project	Marco Maccioni* ("Sapienza" University of Rome)*; Fabio Massimo Gatta ("Sapienza" University of Rome); Alberto Geri ("Sapienza" University of Rome"); Stefano Lauria ("Sapienza" University of Rome"); Francesco Palone (TERNA); Andrea Necci (TERNA); pierluigi Portoghese (TERNA); Luca Buono (TERNA)
1920	Day-Ahead Natural Gas Forecasting Using Nonseasonal Exponential Smoothing Methods	Mustafa Akpinar* (Sakarya University)*; Nejat Yumusak (Sakarya University)
1924	Identification of Estonian Weak Low Voltage Grid Topologies	Kaija Vill* (Tallinn University of Technolo)*; Argo Rosin (TUT)
1929	A Novel Demand Side Management Strategy Implementation Utilizing Real-Time Pricing Schemes	Ioannis Panapakidis (Technological Education Institution of Western Macedonia); George Christoforidis* (Technological Education Institution of Western Macedonia)*; Nikolaos Asimopoulos ; Athanasios Dagoumas
1935	Combining Wavelet Transform and Support Vector Regression Model for Day-Ahead Peak Load Forecasting in the Greek Power System	Ioannis Panapakidis (Technological Education Institution of Western Macedonia); George Christoforidis* (Technological Education Institution of Western Macedonia)*; Nikolaos Asimopoulos ; Athanasios Dagoumas
1941	Analysis of control strategies for compensated inductive power transfer system for electric vehicles charging	Alberto Dolara* (Politecnico di Milano)*; Sonia Leva (Politecnico di Milano); Michela Longo (Politecnico di Milano); Francesco Castelli Dezza (Politecnico di Milano); Marco Mauri (Politecnico di Milano)
1947	Power Pad Design and Optimization for Contactless Electric Vehicle Battery Charging System	Alberto Dolara* (Politecnico di Milano)*; Sonia Leva (Politecnico di Milano); Michela Longo (Politecnico di Milano); Francesco Castelli Dezza (Politecnico di Milano); Marco Mauri (Politecnico di Milano)
1953	Research of Controlled Phase Shifter Operation on a Physical Model of the Transmission Line	Alexander Rozhkov (NRU "MPEI"); Michael Astashev (G. M. Krzhizhanovsky power engineering institute (JSC ENIN) Moscow, Russia); Dmitry Panfilov* (Department of industrial electronics Moscow power engineering institute. Russia)*
1959	A PHIL System Designed for Testing the Dynamic Response of Microgrid Units	Ioan Serban* (Transilvania University of Brasov)*; Catalin Ion (Transilvania University of Bra)
1965	Management of a micro-grid with integrated logic in low voltage systems	Stefania Aramini (Politecnico di Milano); Morris Brenna (Politecnico di Milano); Samuele Grillo* (Politecnico di Milano)*; Enrico Ragaini (ABB)
N/A	Growth and Characterization of Zinc Oxide/Polyaniline Nanocomposites on Glass Substrate for Solar Cell Application	Arnold Alguno* (MSU-Iligan Inst. of Tech.)*; Arnold Lubguban (MSU-Iligan Inst. of Tech.); Reynaldo Vequizo (MSU-Iligan Inst. of Tech.); Katherine Emphasi (MSU-Iligan Inst. of Tech.); Majvell Kay Vequizo (MSU-Iligan Inst. of Tech.); Roberto Malaluan (MSU-Iligan Inst. of Tech.); Blessie Basilia (ITDI Department of Science and Technology)
1971	Home HVAC Energy Management and Optimization with Model Predictive Control	Radu Godina* (University of Beira Interior)*; Eduardo M. G. Rodrigues (UBI); Edris Pouresmaeil ; João P.S. Catalão (Faculty of Engineering of the University of Porto)
1976	Energy Optimization Strategy with Model Predictive Control and Demand Response	Radu Godina* (University of Beira Interior)*; Eduardo M. G. Rodrigues (UBI); Miadreza Shafie-khah (University of Beira Interior); Edris Pouresmaeil ; João P.S. Catalão (Faculty of Engineering of the University of Porto)
1981	Simulation Study of a Photovoltaic Cell with Increasing Levels of Model Complexity	Eduardo M. G. Rodrigues (UBI); Radu Godina* (University of Beira Interior)*; Edris Pouresmaeil ; João P.S. Catalão (Faculty of Engineering of the University of Porto)

1986	An Alternative Solution for the Multiple Estimation Problem using Fuzzy Sets	Jean Rossini* (UFSM)*;Patrick Farias (UFSM);Adriano Morais (UFSM);Ghendy Junior (UFSM);Guilherme Braga da Costa (Federal University of Santa Maria)
1991	Alteration processes of pigments exposed to acetic and formic acid vapors	Marco Malagodi* (University of Pavia)*;Maurizio Licchelli (University of Pavia);Silvia Bottigliero (University of Pavia);Chiara Milanese (University of Pavia);Pacifco Cofrancesco (University of Pavia);Tommaso Rovetta (University of Pavia)
1997	Calculation of Lightning-Induced Overvoltages on Urban Overhead Lines above a Lossy Ground Plane – Appraisal of the Shielding Effect of Nearby Buildings	Fabio Tossani* (University of Bologna)*;Alberto Borghetti ; Fabio Napolitano (University of Bologna);Diego Rios Penalozza ;Alexandre Piantini ; Carlo Alberto Nucci (university of Bologna)
N/A	Modal Extraction for Power Systems using Ambient Data	Morteza Khosravi ;Turaj Amraee* (KN Toosi University of Technology)*;Koorosh Shomalzadeh
2003	Parameter Translation for Single-Diode PV Models Based on Explicit Identification	Maria Carmela Di Piazza (CNR-ISSIA);Massimiliano Luna* (CNR-ISSIA)*;Giovanni Petrone (UNISA);Giovanni Spagnuolo (UNISA)
2008	IoT-Oriented Management of Distributed Energy Storage for the Primary Frequency Control	Davide Falabretti* (Politecnico di Milano)*;Matteo Moncecchi (Politecnico di Milano);Claudio Brivio (Politecnico di Milano);Maurizio Delfanti (Politecnico di Milano);Marco Merlo (Politecnico di Milano);Vincenzo Musolino (CSEM)
2014	Flexibility Assessment Indicator for Aggregate Residential Demand	Muhammad Waseem (University of Engineering & Technology, Taxila, Pakistan); Intisar Ali Sajjad* (Electrical Engineering Department, University of Engineering and Technology, Tax)*;Luigi Martirano (University of Rome Sapienza); Matteo Manganelli (DIAEE - University of Rome Sapienza)
2019	Lithium-ion battery degradation indicators via incremental capacity analysis	David Anseán* (University of Oviedo)*;V́ctor Garća (University of Oviedo);Manuela Gonźlez (University of Oviedo);Cecilio Blanco (University of Oviedo);Juan Carlos Viera (University of Oviedo);Yoana Ferńandez (University of Oviedo)
2025	Lightning Performance of Distribution Lines due to Positive and Negative Indirect Lightning Flashes	Fabio Napolitano (University of Bologna);Fabio Tossani* (University of Bologna)*;Alberto Borghetti ; Carlo Alberto Nucci (university of Bologna); Farhad Rachidi (Swiss Federal Institute of Technology (EPFL))
2030	Reproducibility of Conducted Disturbance Measurements	Carlo Carobbi* (University of Florence)*
2036	Conoscopic laser microprofilometry for 3D digital reconstruction of surfaces with sub-millimeter resolution	Nicola Gaburro (University of Verona);Giacomo Marchioro (University of Verona);Claudia Daffara* (University of Verona)*
2040	Diminishing cost of electricity from wind power and photovoltaics	Vanni Lughi ;Alessandro Massi Pavan (University of Trieste);Paolo Rosato ; Filippo Spertino (POLITECNICO DI TORINO);Silvano Vergura* (Dept. of Electrical and Information Engineering)*
2044	PV Penetration in Distribution Lines of Smart Grids	Silvano Vergura* (Dept. of Electrical and Information Engineering)*;Mario Carpentieri
2050	Electric Vehicle Battery Charger Controlled by Magnetic Core Reactor to Wireless Power Transfer System	Luis Romba (UNINOVA/CTS, Faculdade de Ciências e Tecnologia, Universidade Nova de Lisboa);Stanimir Valtchev (UNINOVA/CTS, Faculdade de Ciências e Tecnologia, Universidade Nova de Lisboa);Rui Melício* (IDMEC, Instituto Superior T́cn)*;Mikhail Mudrov (Ural Federal University, Yekaterinburg, Russia);Anatolii Ziuzev (Ural Federal University)

2056	A Variable Switching Frequency Control Method for Active Front End Multilevel Rectifier	Saeed Ouni* (Sharif University of Technology)*;Masih Khodabandeh (Sharif University of Technology); Mohammad Reza Zolghadri (Sharif University of Technology);Jose Rodriguez (Faculty of Engineering, Universidad Andres Bello)
N/A	Voltage Stability Improvement of Transmission Network Integrated with PV Plants	AFFIJULLA SHAIK* (NIT Meghalaya, India)*;Gaurav Bhatt (NIT Meghalaya, India);SANJOY DEBBARMA (NIT MEGHALAYA)
2061	Takagi-Sugeno Fuzzy Systems Applied to Voltage Prediction of Photovoltaic Plants	Antonello Rosato (University of Rome "La Sapienza");Rosa Altilio (University of Rome "La Sapienza");Rodolfo Araneo (La Sapienza University);Massimo Panella* (University of Rome Sapienza)*
2067	Control of Solid-State Fault Current Limiter for DG-Integrated Distribution Systems	Jaser Sa'ed* (Birzeit University)*;Mahran Quraan (Birzeit University); Muhammad Abu-Khaizaran (Birzeit University);Salvatore Favuzza (DEIM University of Palermo);Fabio Massaro (Univerisity of Palermo)
2072	Impact of Integrating Photovoltaic Based DG on Distribution Network Harmonics	Jaser Sa'ed* (Birzeit University)*;Mahran Quraan (Birzeit University);Qais Samara (Birzeit University);Salvatore Favuzza (DEIM University of Palermo);Gaetano Zizzo (Univerisit degli Studi di Palermo)
2077	Energy Consumption in an Italian Opera House: Analysis and Possible Reduction	Massimo Mitolo (ESI, Engineering and Scientific Investigation 26632 Towne Centre Dr Foothill Ran);Michel Noussan (Politecnico di Torino);Enrico Pons* (Politecnico di Torino)*;Davide Portè (Politecnico di Torino);Michele Tagaglia (Politecnico di Torino)
2083	A Printed Circuit Board Suitable for Controlling a 22.8kVA IGBT's Three-Phase Inverter for DC Nanogrid in a Laboratory Setup	Alessandro Burgio* (University of Calabria)*; Daniele Menniti (Univerisit della Calabria); Nicola Sorrentino (Univerisit della Calabria); Anna Pinnarelli (Univerisit della Calabria);Giuseppe Barone (University of Calabria); Michele Motta (University of Calabria)
2089	Simulation of Enhanced Frequency Response by Battery Storage Systems: the UK versus the Continental Europe System	Silvia Canevese * (RSE)*; Diego Cirio (RSE SpA);Antonio Gatti (RSE S.p.A.);Enrica Micolano (RSE S.p.A.);Luigi Pellegrino (RSE S.p.A.);Marco Rapizza (RSE S.p.A.)
N/A	Infrared heating	Andrea Bogi* (USL Toscana SudEst)*;Francesco Picciolo (University of Siena (Italy));Nicola Stacchini (USL Toscana SudEst);Iole Pinto (Physical Agents Laboratory - USL Toscana SudEst)
2095	Modelling of Single Cell Solid Oxide Fuel Cells Using COMSOL Multiphysics	Sasanka Ranasinghe* (University of Agder)*;Peter Middleton (University of Agder)
2101	Proximal Soil Sensing of Trace Elements. Interferences on Field Measurements Using XRF	Ricardo Urrutia-Goyes* (Universidad de las Fuerzas Arm)*;Nancy Ornelas-Soto ;Ariadne Argyraki (National and Kapodistrian University of Athens)
2105	Coordinated DTC and VOC Control for PMSG based Grid Connected Wind Energy Conversion System	P Sanjeevikumar* (UniBo, Italy)*;Ramesh Babu (VIT University, Vellore, India);Ramiji Tiwari (VIT University, Vellore, India);Pierluigi Siano (University of Salerno);Viliam Fedak (Technical University of Košice Košice, Slovak Republic);Luigi Martirano (University of Rome Sapienza)
2111	A new two-step matching method and loss-allocation method based on the profit proportional sharing principle applied in the Power Trans-regional Transaction	Tianxing Qi* (Xi'an Jiaotong University)*;Xiuli Wang (Xi'an Jiaotong University);Haihua Cheng (China Electric Power Research Institute(Nanjing),Nanjing 210003, Jiangsu Provinc);Wei Zhang (Xi'an jiaotong University,China)

N/A	A new strategy of Trans-regional electricity centralized trade and renewable generation right transaction based on network flow path optimization model	Tianxing Qi* (Xi'an Jiaotong University)*;Bike Xue ;Wei Zhang (Xi'an jiaotong University,China);Xiuli Wang (Xi'an Jiaotong University)
2118	Study of low-voltage distribution system with integration of PV-battery energy storage for urban area in developing country	Vannak VAI* (Grenoble-INP)*;Egor Gladkikh (Grenoble Institute of Technology (Grenoble-INP));Long BUN (Institute of Technology of Cambodia (ITC));Marie-Cecile ALVAREZ-HERAULT ;Bertrand RAISON
2124	Modelling of measured lightning discharge currents to tall towers	Vesna Javor* (University of Nis)*;Karl Lundengård (Mälardalen University, UKK, Västerås, Sweden);Milica Rančić (Mälardalen University, UKK, Västerås, Sweden);Dario Javor (Faculty of Electronic Engineering of Nis, University of Nis, Serbia);Sergei Silvestrov (Mälardalen University, UKK, Västerås, Sweden)
2128	Accurate Analysis of a Single-Phase Dual Active Bridge Converter for ZVS and Deadband Conditions	Farzad Yazdani* (Chalmers university of technol)*;Saeid Haghbin (Chalmers university of technology); Mohammad Reza Zolghadri (Sharif University of Technology);torbjorn thiringer (Chalmers University of technology)
N/A	Capacitor Current Feedback Active Damping for Shunt Active Power Filter with Output LLCL Filter	Mehmet BUYUK* (Çukurova University)*;Adnan Tan (Çukurova University);Mustafa İnci (Çukurova University);Mehmet Tümay (Çukurova University)
N/A	A system of integrated technologies for the handling of automated freight wagons	Domenico Gattuso* (Mediterranea University)*;Gian Carla Cassone (Mediterranea University);Antonio Lucisano (COELDA Software S.r.l.);Francesco Lucisano (COELDA Software S.r.l.);Maurizio Lucisano (COELDA Software S.r.l.)
2134	An LCL Filter with an Active Compensation for a Fast Charger Station	Saeid Haghbin* (Chalmers university of technology)*;torbjorn thiringer (Chalmers University of technology);Mikael Alatalo (Chalmers);Robert Karlsson
2139	Stationary Battery Systems in the main World Markets Part 1: Overview of the State-of-the-art	Enrico Telaretti* (University of Palermo)*;Luigi Dusonchet (Università di Palermo)
2144	Reactive Power Control for Voltage Regulation with Massive Pervasion of Distributed Generators	Haleema Qamar* (University of Sannio, Italy)*;Hafsa Qamar (University of Sannio, Italy);Alfredo Vaccaro (University of Sannio, Benevento);Nisar Ahmed (GIK Institute of Engineering Sciences and Technology, Topi)
2149	Stationary Battery Systems in the main World Markets Part 2: Main Trends and Prospects	Enrico Telaretti* (University of Palermo)*;Luigi Dusonchet (Università di Palermo)
2155	On The Structural Implementation of Magnetic Levitation Windmill	P Sanjeevikumar* (UniBo, Italy)*;Sagar Mahajan (University of Johannesburg);Pierluigi Siano (University of Salerno);Harshal Vaidya (Marathwada Institute of Technology Aurangabad, Maharashtra, India);Aishwarya Taur (Marathwada Institute of Technology Aurangabad, Maharashtra, India);Viliam Fedak (Technical University of Košice Košice, Slovak Republic)
2160	Reliability Evaluation of Plug-in Hybrid Electric Vehicle Chargers	Mohsen Ghavami* (Texas A&M University)*;Chanan Singh (Texas A&M University)
2166	An Improved SA-PSO Global Maximum Power Point Tracking Method of Photovoltaic System under Partial Shading Conditions	Tong Guan* (Xi'an Jiaotong University)*;Fang Zhuo (Xi'an Jiaotong University)

2171	Global Sensitivity and Criterion Performance Analysis of Transformer Leakage Inductance to Winding Deformation	Yan Li (Nanjing Electric Power Engineering Design Co., Ltd; State Grid Jiangsu ERI);Tinghua Wang (Nanjing Electric Power Engineering Design Co., Ltd; State Grid Jiangsu ERI);Zhengping Gao (Nanjing Electric Power Engineering Design Co., Ltd; State Grid Jiangsu ERI);Hejun Huang (Nanjing Electric Power Engineering Design Co., Ltd; State Grid Jiangsu ERI);Hao Wu* (North China Electric Power University)*;Sheng Zou (Nanjing Electric Power Engineering Design Co., Ltd; State Grid Jiangsu ERI);Teng Li (Nanjing Electric Power Engineering Design Co., Ltd; State Grid Jiangsu ERI);Xuanjun Zong (Nanjing Electric Power Engineering Design Co., Ltd; State Grid Jiangsu ERI)
2177	Combined Solar Charging Stations and Energy Storage Units Allocation for Plug-In Electric Vehicles by Considering Uncertainties	Babak Yousefi Khanghah (Aalborg University);Amjad Anvari-Moghaddam* (Aalborg University)*; Josep M. Guerrero (University of Aalborg); Juan C. Vasquez (University of Aalborg)
2183	A Review on Control Strategies of AC/DC Micro Grid	Zhenghong Chen* (Xi'an Jiaotong University)*;Kangda Wang (Xi'an Jiaotong University);Zhengyuan Li (Xi'an Jiaotong University);Tao Zheng (Xi'an Jiaotong University)
2189	Experimental Investigation on the Breakage in Earth Wire Suspension String with Winding Preformed Armor Rods	Guo Deming* (South China University of Tech)*
2194	Impacts of Gas Network Emergencies on Power System through Gas Turbine	Feng Ma* (Xi'an Jiaotong University)*
2199	Considering variations of network topology in optimal relay coordination using Time-Current-Voltage characteristic	Navid Bayati (Amirkabir University);Akbar Dadkhah (Amirkabir University of Technology);Seyed Hesamedin Sadeghi (Amirkabir University of Technology);Behrooz Vahidi (Amirkabir University of Technology);Ali Eftekhari milani* (Politecnico di Milano)*
2204	Analysis of a Three-Phase Dual Active Bridge Converter During the Deadband	Farzad Yazdani* (Chalmers university of technol)*;Saeid Haghbin (Chalmers university of technology); Mohammad Reza Zolghadri (Sharif University of Technology);torbjorn thiringer (Chalmers University of technology)
2210	Analysis of Supra-Harmonics in Smart Grids	Turgay Yalcin (Ondokuz Mayis University);Muammer Ozdemir (Ondokuz Mayis University, Electrical & Electronic Engineering Faculty);Pawel Kostyla ;Zbigniew Leonowicz* (Wroclaw University of Science and Technology)*
N/A	A highf frequency modeling of AC motor in frequency range from 40 Hz to 110 MHz	MILOUDI HOUCINE* (SBA UNIV)*;bendaoud abdelbar (univ-SBA)
2214	Standardization framework on energy efficiency and monitoring	Franco Bua* (ECD)*;Loredana Cristaldi (Politecnico di Milano);Cristina Lavecchia ;Michele Liziero ;Luigi Martirano (University of Rome Sapienza);Luca Mongiovi
2219	Voltage Control in Low Voltage Grids: a Comparison between the Use of Distributed Photovoltaic Converters or Centralized Devices	Alessandro Ciocia* (Politecnico Di Torino)*; Gianfranco Chicco (Politecnico Di Torino); Paolo Di Leo (Politecnico Di Torino); Filippo Spertino (Politecnico Di Torino);Marco Gai (Politecnico di Torino);Nouredine Hadj-Said (Grenoble INP);Andrea Mazza (Politecnico di Torino)

2225	Assessment Criteria for a Distributed Energy Measurement and Monitoring System	Luigi Martirano* (University of Rome Sapienza)*;Luigi Borghi (Didelme Sistemi srl); Franco Bua (ECD);Loredana Cristaldi (Politecnico di Milano);Giulia Frattini (Energyteam spa);Giacomo Grigis (Schneider Electric S.p.A.);Cristina Lavecchia ;Michele Liziero ;Luca Mongiovi ;Emanuele Nastri (Ministero Sviluppo Economico); Enrico Tironi (Politecnico di Milano)
2232	First Observational campaign of space debris from OAG observatory	Giampiero Sindoni* (Dip. Ing. Astronautica Elettrica ed Energetica (DIAEE) Sapienza University of Ro)*;Vincenzo Gagliarducci ;Tommaso Di Sabato (Università di Lecce)
2236	A Novel Modulation Method for Reducing Common Mode Voltage in Three-Phase Inverters	Negar Noroozi* *; Mohammad Reza Zolghadri (Sharif University of Technology);Mokhtar Yaghoubi (Amirkabir university of technology)
2241	Data efficiency for the satellite LARES	Claudio Paris* (Museo Storico della Fisica e Centro Studi e Ricerche Enrico Fermi)*;Antonio Paolozzi (Sapienza University of Rome); Giampiero Sindoni (Dip. Ing. Astronautica Elettrica ed Energetica (DIAEE) Sapienza University of Ro);David Arnold (Smithsonian Astrophysical Observatory);Erricos C. Pavlis (Goddard Earth Sciences and Technology Center); Ignazio Ciufolini (Dipartimento di Ingegneria dellInnovazione Salento University and Centro Fermi);Ludwig Grunwaldt (Helmholtz Centre Potsdam, GFZ German Research Centre for Geosciences);Reinhart Neubert (Helmholtz Centre Potsdam, GFZ German Research Centre for Geosciences)
2247	State-Feedback Nonlinear Control of Three-phase Grid Connected to the Photovoltaic System	Chaouqi Aouadi* (Faculty Of Sciences Ben M'sik)*;Yasser Boussairi (FSBM);Abdelmajid Abouloifa (FSBM);Abdellatif Hamdoun (FSBM);Meriem Aourir (FSBM);Ibtissam Lachkar
2253	El Nino effects on Earth rotation parameters from LAGEOS and LARES orbital analysis	Erricos C. Pavlis (Goddard Earth Sciences and Technology Center); Giampiero Sindoni* (Dip. Ing. Astronautica Elettrica ed Energetica (DIAEE) Sapienza University of Ro)*;Antonio Paolozzi (Sapienza University of Rome);Alessandro Gabrielli (ASI);Magdalena Kuzmicz-Cieslak (Joint Center for Earth Systems Technology, (JCET/UMBC));Claudio Paris (Sapienza); Ignazio Ciufolini (Dipartimento di Ingegneria dellInnovazione Salento University and Centro Fermi)
2259	Speed control of a DC motor using a fractional order sliding mode controller	Saeed Heidarpour (Islamic Azad University);Mohammad Tabatabaei* (Islamic Azad university)*;Hamed Khodadadi (Khomeinishahr branch, Islamic)
2263	Novel Controllers Based on Instantaneous p-q Power Theory for Transformerless SSSC and STATCOM	Maysam Abbasi* (Urmia University, Urmia, Iran)*;Behrouz Tousi (Urmia University)
N/A	Nonlinear control of a Single Phase Shunt Active Filter connected photovoltaic systems via sliding mode	Aicha ELALLALI* (Faculté des sciences ben m'sik)*;ABDELMAJID ABOULOIFA (FSBM);Ibtissam Lachkar (lachkaribtissam@gmail.com);chaimaa taghzaoui (Faculté des sciences ben m'sik Casablanca);Youssef MCHAOUAR (Faculty of Sciences Ben M'sik);ABDELLATIF HAMDOUN (FSBM)
2273	Fiber-based wide field-of-view optical antenna for non-line-of-sight wireless optical communication	Feras AbouGalala* (American Uni of Middle East)*

2277	A Second Order Cone Based Relaxation and Decomposition Algorithm for Multi-period Reactive Power Optimization Considering Uncertain PV Integration in Active Distribution Networks	Shiyu Liu* (Xi'an Jiaotong University)*;Tao Ding ;Zhaohong Bie (Xi'an Jiaotong University);Yang Hong (Politecnico di Milano); Alberto Berizzi (Politecnico di Milano)
2283	FPGA-based Hardware-in-the-Loop system bits capacity evaluation based on induction motor model	Mikhail Mudrov* (Universidade NOVA de Lisboa)*;Anatolii Ziuzev (Ural Federal University);Konstantin Nesterov (Ural Federal University);Stanimir Valtchev (UNINOVA/CTS, Faculdade de Ciências e Tecnologia, Universidade Nova de Lisboa)
2288	Research on Indoor Multipoint Data Acquisition with a Micro UAV	Yonghong Yin* (Xi'an Jiaotong University)*;Yu Chen (Xi'an Jiaotong University);Lu Wan (Politecnico di Milano);Yuqi Zhang (Xi'an Jiaotong University);Yuxin Yang (Xi'an Jiaotong University)
2292	Calculation of Complex Permittivity for Shielding Effectiveness Equivalence	Mingxiang Gao* (Xi'an Jiaotong University)*;Yanzhao Xie (Xi'an Jiaotong University);Qi Li (Xi'an Jiaotong University)
2297	Multi-physics Modeling and Optimized Design of Asymmetric Integrated Optical Sensor for Electromagnetic Pulse Measurement	Lu Wan* (Politecnico di Milano)*;Yu Chen (Xi'an Jiaotong University);Yonghong Yin (Xi'an Jiaotong University);Flavia Grassi (Politecnico di Milano);Sergio Pignari (Politecnico di Milano);Yonghong Cheng (Xi'an Jiaotong University)
2302	Service Continuity of PV Synchronous Buck/Buck-Boost Converter With Energy Storage	Saima Siouane ;Slavisa Jovanovic* (University of Lorraine)*;Philippe Poure
2308	Charging Electric Vehicles Using Opportunistic Stopovers	Pierluigi Gallo* (University of Palermo)*
2313	Protection of group 2 medical locations (operating rooms) from atmospheric surges	Giovanni Luca Amicucci* (INAIL)*; Fabio Fiamingo (INAIL-DIT)
N/A	Simulation research on radiation interference of pole switch caused by switching operations	Yimin Zhao* (Xi'an Jiaotong University)*;Yongxiang Yu (Xi'an Jiaotong University);Haomin Li (Xi'an Jiaotong University);Yingsan Geng (Xi'an Jiaotong University)
2319	Accidents with injuries or death during non-electrical work activities near overhead power lines	Giovanni Luca Amicucci* (INAIL)*;Maria teresa Settino (INAIL)
2325	Usage of RFID in safety applications	Giovanni Luca Amicucci* (INAIL)*; Fabio Fiamingo (INAIL-DIT)
2331	The Integrated Reliability Evaluation of Distribution Network Considering the System Voltages Adjustment	Yang Hong* (Xi'an Jiaotong University)*;Zhaohong Bie (Xi'an Jiaotong University); Alberto Berizzi (Politecnico di Milano);Gengfeng Li (Xi'an Jiaotong University);Shiyu Liu (Xi'an Jiaotong University)
2337	Energy Consumption Modelling and Forecasting in Automotive Paint Shop	Aldo Canova* (Politecnico di torino)*;Vincenzo Di Lago (Centro Ricerche Fiat);Francesco Baglivo (Fiat);Giuseppe Laudicina (Politecnico di Torino)
2344	Long term performance of a PV system with monocrystalline PV cells – a case study	Dominika Kaczorowska (Wroclaw University of Science and Technology);Zbigniew Leonowicz* (Wroclaw University of Science and Technology)*;Jacek Rezmer (Wroclaw University of Technology); Przemyslaw Janik (Wroclaw University of Technology)
2352	Smart Inverter Arc Fault Protection for Photovoltaic Power Systems	Benjamin Vidales Luna* (Universite Lorraine)*;Serge Weber (Universite Lorraine);Patrick SCHWEITZER (Université de Lorraine);domingo Torres Lucio (Instituto Tecnológico de Morelia);Manuel Madrigal Martinez (Technological Institute of Morelia)

2358	Start-up, functionalities and protection issues for CHB-based Solid State Transformers	Jose Maria Cuartas Alonso* (INAEL)*;Fernando Briz del Blanco (UNIOVI);Mario Lopez (UNIOVI);Antonio de la Cruz (INAEL)
2363	IR thermography as a preliminary tool in acoustical inspection of ancient historical structures	Dario Ambrosini (L'Aquila University);Fabio Bisegna* (Universita degli studi di Roma Sapienza)*
N/A	Third Order Harmonic Elimination Technique For APFC Circuit	Hussein Al-bayaty* (Plymouth)*;Ali Al-Omari (University of Plymouth);Marcel Ambroze (Plymouth university);Dr. Mohammed Ahmed (University of Plymouth)
N/A	A Single-Input Dual-Output Boost Converter With PI Controller	Niharika Deshpande* (Student)*;Amol Nikum
2367	Optimization of Compact Overhead Lines of 138/230kV: Optimal Selection and Arrangement of Cables and Definition of the Best Transmission Line Tower Topology	Marcos Felipe Ribeiro* (Federal University of Minas Gerais (UFMG))*;João Vasconcelos (Federal University of Minas Gerais (UFMG));Douglas Teixeira (Federal University of Minas Gerais)
2373	A Comparative Analysis of Loss of Excitation Protection Methods for Synchronous Generators	Mairon Gallas* (UFSM)*;Adriano Morais (UFSM);Adriano Marchesan (UFSM);Ghendy Junior (UFSM);Guilherme Braga da Costa (Federal University of Santa Maria)
2379	Curve Fitting Analysis of Time-Current Characteristic of Expulsion Fuse Links	Guilherme Braga da Costa* (Federal University of Santa Maria)*;Adriano Marchesan (UFSM);Adriano Morais (UFSM);Ghendy Junior (UFSM);Mairon Gallas (UFSM)
N/A	Research on Case Library Construction of Energy Loss in Rural Distribution Networks with Regional Differentiation Theory	Ze Yuan* (China Agricultural University)*
2385	Some Aspects of Steady State Simulations of AC/DC Hybrid Transmission Lines	Alexander Novitskiy* (Ilmenau University of Technology)*; Dirk Westermann (Ilmenau University of Technology)
2389	Power Distribution for the SPIDER and MITICA Experiments at the ITER Neutral Beam Test Facility: A System Description and Analyses	Marco Bigi* (Consorzio RFX)*;Gabriele Lazzaro (Consorzio RFX);Alberto Maistrello (Consorzio RFX);Antonio De Lorenzi (Consorzio RFX)
2393	Architetur Criteria for a Distributed Energy Monitoring System	Loredana Cristaldi* (Politecnico di Milano)*; Enrico Tironi (Politecnico di Milano);Luca Mongiovi ;Michele Liziero ;Giacomo Grigis (Schneider Electric S.p.A.); Luigi Martirano (Sapienza University of Rome);Cristina Lavecchia ;Giulia Frattini (Energyteam spa);Luigi Borghi (Didelme Sistemi srl)
2399	An Analytical Approach For Transmission Expansion Planning with Generation Variations	RAMINDER KAUR* (PEC University of Technology)*;TARLOCHAN KAUR (PEC University of Technology Chandigarh);MANEESH KUMAR (Indian Institute of Technology Roorkee)
N/A	OptimalCombining Scheme to Reduce Power Loss in Distribution System by Considering Carbon Emission	Hongwei Tang* (China Agricultural University)*
N/A	Finite Difference Method in calculating magnetic field within substation environment for EMC studies	Aine Izzati Tarmizi* (UTeM)*

2404	Survey of Electric Power Supplies Used in Nuclear Fusion Experiments	Alessandro Lampasi* (ENEA Frascati)*;Simone Minucci (University of Naples Federico II)
2410	PV Output Power Smoothing Using Flywheel Storage System	Abdalkarim Awad* (University of Erlangen)*;Iyad Tumar ;Mohammed Hussein ;Wasel Ghanem ;Jaser Sa'ed (Birzeit University)
2416	The European DEMO Fusion Reactor: Design Status and Challenges from Balance of Plant and Electrical Power Supply System Point of View	Sergio Ciattaglia (EUROfusion);Luciana Barucca (Ansaldo);Gianfranco Federici ;Elena Gaio (RFX);Alessandro Lampasi* (ENEA Frascati)*;Simone Minucci (University of Naples Federico II)
2422	Real Time Implementation of non-DFT Based Three Phase Phasor Measurement Unit as per IEEE Standard C37.118.1	Syed Akif Ali ;Narmeen Aamir ;Muhammad Sayem Suleman ;Wajiha Hasan ;Manaal Shaikh* (NED University of Engg & Tech)*;Muhammad Ali Memon (NED University of Engineering & Technology)
2428	Hybrid Time Triggered Protocol for Home Wireless Communications	Eduardo M. G. Rodrigues* (University of Beira Interior)*;Radu Godina (University of Beira Interior);Edris Pouresmaeil ;João P.S. Catalão (Faculty of Engineering of the University of Porto)
2434	Designing a Power Control Strategy in a Microgrid Using PID / Fuzzy Controller Based on Battery Energy Storage	MOSTAFA KERMANI* (SAPIENZA University)*; Giuseppe Parise ("Universit di Roma ""Sapienza""");Luigi Martirano (University of Rome Sapienza);Morteza Kermani
2439	Measuring the protective role of clay-based renders in adobe masonry using thermal imaging and ultrasonic velocity imaging	Georgios Karagiannis* (ORMYLIA Foundation)*;Georgios Apostolidis ("ORMYLIA" Foundation);Maria Stefanidou (Aristotle University of Thessaloniki)
2443	Home and Building Automation through Social Networks	Luis Basaca-Preciado* (CETYS University)*;Alvaro Moreno-Partida (CETYS University);Juan Terrazas (CETYS University);Miguel Ponce Camacho (CETYS University);Josue Lopez (CETYS University);Julio Rodriguez-Quiñonez (Autonomous University of Baja California);Wendy Flores Fuentes (Autonomous University of Baja California);Oleg Sergiyenko (Autonomous University of Baja California)
2447	Design of Actual Application Software for Power Loss Evaluation in Distribution System	Xiaoyu Zhao* (China Agricultural University)*
2453	Vehicle electrification: a further variable toward integrated intelligent energy systems	Pierluigi Siano* (University of Salerno)*;Dario Marra ;Gianfranco Rizzo ;Francesco Tiano ;Miadreza Shafie-khah (University of Beira Interior)
2459	Low Voltage Microgrid Islanding through Adaptive Load Shedding	Federico Silvestro* (Universita' di Genova)*; Stefano Massucco (University of Genova);Fabio D'Agostino (UNIGE);Enrico Ragaini (ABB);Antonio Fidigatti ;Fabio Monachesi (ABB SACE)
2465	Flexible secondary pad design for wireless power transfer providing public interoperability	Olaf Simon* (SEW Eurodrive)*;Thomas Krempel (SEW Eurodrive);Harald Wolf (SEW Eurodrive);Jochen Mahlein (SEW Eurodrive)
2472	Comparative Analysis of Different Topologies for Wireless Power Transfer Systems	Ioana-Gabriela Sirbu* (University of Craiova)*;Lucian Mandache (University of Craiova)
2478	An Innovative BESS Management for dynamic frequency restoration	Giorgio Graditi* (ENEA Portici)*;Roberto Ciavarella (ENEA);Maria Valenti (ENEA)

2483	Modified Newton Type Algorithm-Based Frequency and Phase Estimation Technique in Harmonics-Polluted Grid	Eduardo M. G. Rodrigues* (University of Beira Interior)*; Radu Godina (University of Beira Interior); Edris Pouresmaeil ; João P.S. Catalão (Faculty of Engineering of the University of Porto)
2489	Analysis and Simulation of Voltage Sags Using EMTP	Dung Vo Tien (VSB-TUO Ostrava); Radomir Gono (VSB-TUO Ostrava); Zbigniew Leonowicz* (Wroclaw University of Science and Technology)*
2494	Reduction of capacitor aging by the use of transient-free diode-based synchronous switch	Enrico Ragaini* (ABB)*; Francesco Viaro (ABB); Gian Carlo Montanari (Università di Bologna); Claudio Mastromauro (Politecnico di Milano)
2500	Full Bridge Three Port Converter Power Flow Control Using Fuzzy Logic Controller	Sarab AL-Chlahawi* (University Politehnica of Buc); Aurelian Craciunescu (University Politehnica of Bucharest); Mohamed Louzazni (Laboratory of Innovative Technologies, National School of Applied Sciences, Abde); Ammar Al-Gizi (1Electrical Engineering Faculty, University Politehnica of Bucharest)
2506	Remote Control of Nanogrids: a Cost-effective Solution in a Laboratory Setup	Alessandro Burgio* (University of Calabria)*; Daniele Menniti (Università della Calabria); Anna Pinnarelli (Università della Calabria); Nicola Sorrentino (Università della Calabria); Michele Motta (University of Calabria); Giuseppe Barone (University of Calabria)
2512	Reliability and Maintenance in High-Power Grid-Connected Photovoltaic Systems: A Survey of Critical Issues and Failures	Giulia Piantoni* (University of Rome La Sapienza)*; Rodolfo Araneo (La Sapienza University)
2516	Electrical risks assessment and management at work in Italy	Ruggero Maialetti* (INAIL)*
N/A	Periodic inspection and testing of electrical installations in potentially explosive atmospheres	Fausto Ditosto* (INAIL)*
2522	Monte Carlo simulation and Hardware-In-the-Loop testing for evaluation of reliability of Integrated Energy Systems	Enrico Ragaini* (ABB)*; Mattia Bettinelli (Politecnico di Milano); Yuxiong Huang (Xi'An Jiaotong University); Gengfeng Li (Xi'An Jiaotong University)
2528	Hardware-in-the-loop simulation for testing low voltage circuit breakers selectivity	Enrico Ragaini* (ABB)*; Jinjun Liu (Xi'An JiaoTong University); Luca Bertoletti (Politecnico di Milano)
2533	Nonlinear droop control for minimum power losses operation in islanded microgrids	Salvatore Favuzza* (DEIM University of Palermo)*; Maria Luisa Di Silvestre (University of Palermo); Eleonora Riva Sanseverino (DEIM University of Palermo); Quynh Tran (University of Palermo); Hakam Shehadeh (Università di Palermo)
N/A	Determination of Soil Suitability for Agriculture Farming Using Microwave Analysis	Lakhvinder Solanki* (SLIET (Deemed University))*; Surinder Sing (Sant Longowal Institute of Engg. & Tech. Longowal, District Sangrur, Punjab, Ind); Nandini Garg (Sant Longowal Institute of Engg. & Tech. Longowal, District Sangrur, Punjab, Ind)
2538	IRAN Electricity Market Potential and Obstacle	Arsalan Bayatmakoo* *
2541	Fire safety criteria in electrical installations design	Michele Mazzaro* *; Calogero Turturici (Italian National Fire Brigades); Pierpaolo Gentile (Italian National Fire Brigades)

2548	Characterization of a Power Line Cable for Channel Frequency Response - Analysis and Investigation	Sheri Ashraf (University of Johannesburg);Arnold De Beer (University of Johannesburg);P Sanjeevikumar* (UniBo, Italy)*;Allan Emlah (University of Johannesburg);Hendrik Ferreira (University of Johannesburg)
2552	Time Domain Magnetic Shielding Performance of Thin Shields	Rodolfo Araneo* (La Sapienza University)*;Salvatore Celozzi (Sapienza University of Rome);Giampiero Lovat (Sapienza University of Rome);Paolo Burghignoli (D.I.E.T. Sapienza University of Rome)
2557	Analysis of work accidents with electrical origin	Paolo Panaro* *
2561	Investigating the Effects of Selecting Different Slack Bus on Power Systems	Ashghar Sabati* (Gazi University, Faculty of Technology Department of Electrical & Electronics En)*;Kivanc Basaran (Manisa Celal Bayar University Hasan Ferdi Turgutlu Technology Faculty);Ramazan Bayindir (Gazi University Faculty of Technology Department of Electrical & Electronics Eng);P Sanjeevikumar (UniBo, Italy);Pierluigi Siano (University of Salerno);Zbigniew Leonowicz (Wroclaw University of Technology)
2567	A Hexagonal Hysteresis Space Vector Current Controller for Single Z-Source Network Multilevel with Capacitor Balancing	Bharatiraja Chokkalingam* (Department of Electrical & Electronics Engineering, SRM University)*;P Sanjeevikumar (UniBo, Italy);Pierluigi Siano (University of Salerno);Frede Blaabjerg (Aalborg University);Zbigniew Leonowicz (Wroclaw University of Science and Technology);Atif Iqbal (Department of Electrical Engineering, Qatar University, Doha, Qatar)
N/A	Performance Analysis Of Multilevel Inverter Fed Two Induction Motor In Parallel With Estimated Parameter For Traction Application	S. Usha* (1Department of Electrical and Electronics Engineering, SRM University)*;C. Subramani (1Department of Electrical and Electronics Engineering, SRM University);S.S. Dash (Department of Electrical and Electronics Engineering, SRM University);P Sanjeevikumar (UniBo, Italy);Zbigniew Leonowicz (Wroclaw University of Science and Technology)
2573	Realization of 5-bus System Using Soft Computing Technique for Flexible Alternating Current Transmission System (FACTS) Devices	Zade Ankit Ashokrao* (Dept. of Electrical Engg. Jagadambha College of Engineering and Technology)*;pachagade Ruchi. ;P Sanjeevikumar (UniBo, Italy);Sagar Mahajan (University of Johannesburg); Luigi Martirano (Sapienza University of Rome);Zbigniew Leonowicz (Wroclaw University of Science and Technology)
N/A	Controller Implementation for a Bidirectional Non-Isolated Buck-Boost Converter with High Voltage Gain in Electric Vehicle Application	Geetha Anbazhagan (Department of Electrical and Electronics Engineering, SRM University);C. Subramani (1Department of Electrical and Electronics Engineering, SRM University);S.S. Dash (Department of Electrical and Electronics Engineering, SRM University);P Sanjeevikumar* (UniBo, Italy)*;Zbigniew Leonowicz (Wroclaw University of Science and Technology)
2578	Electric Field Analysis of Extra High Voltage (EHV) Underground Cables Using Finite Element Method	Mantosh Kumar* (Dept. of Electrical Engg. Mewar University, Chittorgarh)*;Sagar Mahajan (University of Johannesburg);P Sanjeevikumar (UniBo, Italy);Pierluigi Siano (University of Salerno);Frede Blaabjerg (Aalborg University);Zbigniew Leonowicz (Wroclaw University of Science and Technology)
2582	Integration of a Storage System in a Hybrid System "Diesel-Photovoltaic" For Stand-alone Applications	Ahmed Belila (Ecole militaire Polytechnique);Bekheira Tabbache ;El-Madjid Berkouk ;Mohamed Benbouzid* *
2588	Comparative Analysis of Common MPPT Techniques for Solar PV System with Soft Switched, Interleaved Isolated Converter	T. Anuradha; P. D. Sundari (Dept. of Electrical and Electronics Engg. Anna University); S. Padmanaban (Dept. of Electrical & Electronics Engg. University of Johannesburg); P. Siano (Dept of Industrial Engg. University of Salerno); Z. Leonowicz (Faculty of Electrical Engg. Wroclaw University of Technology)

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