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- 421 Voltage Regulation through Wide Area Voltage Control of HV/MV**

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424 The Effect of using an Ethanol blended fuel on Emissions in an SI Engine

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431 Thermal evaluation of molten salts for solar thermal energy storage

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440 Voltage and Current Control Strategy for Grid Connected WECS Employing Two and Three Level Voltage Source Converters

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441 Ultrasound-assisted production of biodiesel from oils with saturated and unsaturated fatty acids

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445 A Diagnostic Workflow and Software Platform for PV Modules

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446 Experimental study on mass transfer comparison of two liquid desiccants aqueous solutions

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448 Voltage Control and Power System Stability Enhancement using UPFC

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452 Practical Advantages of Multivariable Control Strategy for Off-Grid Variable-Speed Variable-Pitch (VS-VP) Wind Turbines

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455 Assessment of PV generation based on spherical irradiation measurements

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457 Optimization of copper in a renewable source based network

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458 Optimization of solar source based network

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460 Harmonic Emission of Large PV Installations Case Study of a 1 MW Solar Campus

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461 Inverted hybrid solar cells based on UV-stabilizers with nanopartcles in P3HT:PCBM

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463 Harmonic resonances due to transmission-system cables

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465 Proposal of Technical and Commercial Arrangements for Distributed Generation from the Use of Biogas in a Food Industry

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466 Virtual Desktop Infrastructure (VDI) Technology: impact of ICTs on the ecological footprint FI4VDI-SUDOE project

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468 New Model for the Estimation of Solar Radiation on Façades in Urban Environments

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469 Power-Flow-Optimising-Algorithm used in an Energy Management for Micro Grids

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470 Parameter Identification of Heffron-Phillips Model Considering AVR Using On-Line Measurements Data

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472 Emission on the low voltage grid: measurements in an urban area

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- 475 Adaptive Threshold for Electrical Disturbances Segmentation**
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- 478 Control of a PEM fuel cell based on maximum power tracking using radial basis function neural networks**
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- 480 Object-Oriented Modelling of Small Hydropower Plants**
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- 483 Analytical Expression For The Optimum Tower Height of WECS**
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- 485 Telecommunications Infrastructure to Support Distributed Resources Connected to Electricity Distribution in a Smart Grid Scenario**
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- 486 An approach for cost and configuration optimization of horizontal axis wind turbine (HAWT)**
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- 488 Study of parameters for the design of a continuous flow laboratory biogas reactor**
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- 490 Calculation of phase angle diversity for time-varying harmonic currents from grid measurement**
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- 491 Microgrid control system architecture for improving energy efficiency and demand response integration**
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- 492 Heating and cooling a building using water from boreholes**
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- 498 Control strategy for an interface to improve the power quality at the**

connection of AC microgrids**Salvador Pérez Litrán, Patricio Salmerón Revuelta, Jaime Prieto, Alejandro Pérez Vallés**

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499 Employing Hydrogen Fuel Cell in Hybrid Energy Systems for Stand-Alone, Off-Grid Remote Sites in UAE**Ensiyeh Keshtkaran, Abbas A. Fardoun, Hassan Noura**

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500 Comparison of Discharge Performance of 12V/150Ah Gel and AGM Sealed Lead-acid Batteries in Stand-alone PV-based Systems in UAE**Zahi M. Omer, Ahmed M. Alameri, Abbas A. Fardoun, Ala A. Hussein**

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502 Demand-Side Management Efficiency Estimation in Microgrids Performed by Smart Metering Systems**Vladislav O. Samoilenko, Andrew V. Pazderin**

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503 Assessment of unbalance and distortion in power systems that include active power line conditioners**Jaime Prieto, Patricio Salmerón Revuelta, Alejandro Pérez Vallés, Salvador Pérez Litrán**

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504 Impact of the integration of photovoltaic installations in rural grids: case study**O. Azurza(1), I. Zubia(1), J.X. Ostolaza(2), L.A. Leturiondo(3), A. Lazkano(3)**

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506 Intelligent Management Experience on Efficient Electric Power System**A. Martín, C. León, F. Biscarri**

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507 Possibilities for small hydro power plant construction in the old bed of the river Drava**K. Deželak, J. Pihler, G. Štumberger**

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509 Electric motors monitoring: An alternative to increase the efficiency of ball mills**M. G. Melero(1), J. M. Cano(1), J. Norniella(1), F. Pedrayes(1), M. F. Cabanas(1), C. H. Rojas(1), G. Alonso(1), J. M. Aguado(2), P. Ardura(1)**

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- 512 Review of Procedures for Verification of Grid Code Compliance of Renewable Generation**
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- 514 Mitigation of Dynamic Effects in a Specific Wind Turbine Generation System through Use of STATCOM**
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- 515 Microgrids, a new business model for the energy market**
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- 516 Analysis of European policies and incentives for microgrids**
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- 519 Efficient biogas production from the liquid fraction of dairy manure**
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- 523 Partially shaded photovoltaic panel**
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- 526 Wind Turbines Based on Doubly Fed Induction Generator in Coordinate Operation with a STATCOM**
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- 529 Energy consumption profiles in buildings**

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533 An analysis of the characteristics of the simultaneous feed-in of photovoltaic and wind power plants based on measured power values

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534 Microwave Optical Switches Metal–Semiconductor–Metal Schottky based on GaAs

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535 Estimating the potential for conservation of electrical energy in the residential sector of Manaus-AM/Brazil, from the power quality evaluation

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537 Use of an Ethanol-powered Motor-generator to Electricity Generation for Countryside Population and Small Isolated Communities

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539 Implementation of a Forest Biomass-based Biofuel Industry: A Canadian Experience

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542 Complex method for performance prediction of photovoltaic systems

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544 The shift from „grid-tie” to partly „off-grid”

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547 Impact of Plug-In Electric Vehicle Battery Charging on a Distribution System Based on Real-Time Digital Simulator

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550 Study of the distribution of temperatures in the windings of a transformer after suffering a short-circuit.

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551 Comparison of Different Innovative Technical Solutions for Voltage Regulation in Distribution Grids

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552 A Mixed GA and Tree-Gradient Method for Optimization of Distributed Generation

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556 Simulation of a small-scale electricity generation system from biomass gasification

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558 Alcohol-diesel fuel blends and their effect in performance and exhaust emissions

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560 Estimation and Forecast of Wind Power Generation by FTDNN and NARX-net based models for Energy Management Purpose in Smart Grids

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562 Wind Tunnel Experiments on Vertical-Axis Wind Turbines with Straight Blades

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563 Comparison of Artificial Bee Colony Algorithm with other Algorithms used for Tracking of Maximum Power Point of Photovoltaic Arrays

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564 Small Hydro Plant Developments

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568 Application of Different Indices of Performance Evaluation of Forecast for Wind Speeds

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570 Ageing of Electric Vehicle Battery considering Mobility Needs for Urban Areas

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575 Design of Fast Real Time Controller for the SSSC Based on Takagi Sugeno (TS) Adaptive Neuro-Fuzzy Control System

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576 State and Space Vectors - Complementary Description of the 2-level VSI

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