Modeling of load-transient response of direct-duty-ratio-controlled buck converter
Research output: Scientific - peer-review › Conference contribution

Photovoltaic mismatch losses caused by moving clouds
Research output: Scientific - peer-review › Article

Nanocomposite Polypropylene For DC Cables And Capacitors: A New European Project
Research output: Scientific - peer-review › Conference contribution

Resistive current waveform as a tool to identify degraded parts of polymeric surge arresters subjected to internal moisture
Research output: Scientific - peer-review › Conference contribution

Analysis of Transition Steps Towards Power-based Distribution Tariff of Small Customers
Research output: Scientific - peer-review › Conference contribution

Cost-benefit Analysis for Using the Li-ion Batteries in Low-voltage Network for Decreasing the Outage Time Experienced by Customers
Research output: Scientific - peer-review › Conference contribution

Development of Power-based Tariff Structure for Small Customers and Pathway for This Change
Research output: Scientific - peer-review › Conference contribution

Earthing Systems Connected via Metallic Screens of the 20 Kv Underground Cables in Non-urban Areas
Research output: Scientific - peer-review › Conference contribution

Field testing of a wideband monitoring concept at MV side of secondary substation
Research output: Scientific - peer-review › Conference contribution

Generation Curtailment as a Means to Increase the Wind Power Hosting Capacity of a Real Regional Distribution Network
Research output: Scientific - peer-review › Conference contribution

Reforming Distribution Tariffs of Small Customers: Targets, Challenges and Impacts of Implementing Novel Tariff Structures
Research output: Scientific - peer-review › Conference contribution
Aspects of moisture ingress in polymer housed surge arresters
Research output: Scientific - peer-review › Article

Effects of PV array layout, electrical configuration and geographic orientation on mismatch losses caused by moving clouds
Research output: Scientific - peer-review › Article

Utilization Possibilities of Electrical Energy Storages in Households’ Energy Management in Finland
Research output: Scientific - peer-review › Article

Simulation Environment for Centralized Protection and Control applying dSPACE and RTDS with IEC 61850 9-2 Communication
Research output: Scientific - peer-review › Conference contribution

Development and Testing of New Equipment for Faulty Phase Earthing Applying RTDS
Research output: Scientific - peer-review › Review Article

Development of Modern Phase Earthing System for Improving Quality of Supply in MV Network
Research output: Scientific - peer-review › Review Article

Edellytykset kysyntäjouston toteutumiselle kiinteistössä
Research output: Professional › Discussion paper

Energiatehokkuus on entistä enemmän sähkötehon hallintaa
Research output: Scientific › Conference contribution

A comparative study between surge arrester monitoring through capacitive/resistive measurement bridge and digital decomposition
Research output: Scientific - peer-review › Conference contribution

Detection of Subsynchronous Torsional Oscillation Frequencies Using Phasor Measurement
Research output: Scientific - peer-review › Article

Improving Disturbance Management with Combined Electricity and Mobile Network Situation Awareness System
Research output: Scientific - peer-review › Article
Recognition of shading events caused by moving clouds and determination of shadow velocity from solar radiation measurements
Research output: Scientific - peer-review › Conference contribution

Risk Assessment of Major Storm Situation in Distribution System
Dehghani, N., Supponen, A. & Repo, S. 1 Sep 2015 2015 50th International Universities Power Engineering Conference (UPEC). IEEE
Research output: Scientific - peer-review › Conference contribution

Low-Voltage DC Distribution-Utilization Potential in a Large Distribution Network Company
Research output: Scientific - peer-review › Article

Improved adaptive input voltage control of a solar array interfacing current mode controlled boost power stage
Research output: Scientific - peer-review › Article

Real-Time Low Voltage Network Monitoring - ICT Architecture and Field Test Experience
Research output: Scientific - peer-review › Article

Change Detection of Electric Customer Behavior Based on AMR measurements
Research output: Scientific - peer-review › Conference contribution

Monetary impact of dynamic pricing and demand response on households: The winners and losers
Research output: Scientific - peer-review › Conference contribution

A communication based protection system for solving DG related protection challenges
Research output: Scientific - peer-review › Conference contribution

Modelling of simultaneous fault to reliability enhancement in distribution system
Research output: Scientific - peer-review › Conference contribution
Novel Sensor Solutions for On-Line PD Monitoring
Research output: Scientific - peer-review › Conference contribution

Practical Implementation of Demand Response in Finland
Research output: Scientific - peer-review › Conference contribution

Reserve Power – Alternative Solution to the Network Investments in Rural Area Networks?
Research output: Scientific - peer-review › Conference contribution

A novel VSC-HVDC link model for dynamic power system simulations
Research output: Scientific - peer-review › Article

Demand Side Management In Open Electricity Markets from Retailer Viewpoint
Research output: Scientific - peer-review › Conference contribution

Product level accelerated reliability testing of motor drives with input power interruptions
Research output: Scientific - peer-review › Article

Role of public regulators in demand response business ecosystem - Case New York State electric power market
Research output: Scientific - peer-review › Conference contribution

Comprehensive dynamic analysis of photovoltaic generator interfacing DC-DC boost power stage
Research output: Scientific - peer-review › Article

Matlab/Simulink modeling to study the effect of partially shaded condition on photovoltaic array's maximum power point
Research output: Scientific - peer-review › Article

A Finite Element Simulation Tool for Predicting Hysteresis Losses in Superconductors Using an H-Oriented Formulation with Cohomology Basis Functions
Research output: Scientific - peer-review › Article

Evolving Smart Meter Data Driven Model for Short-Term Forecasting of Electric loads
Dynamics of photovoltaic-generator-interfacing voltage-controlled buck power stage
Research output: Scientific - peer-review › Article

Driving pattern analysis of Nordic region based on National Travel Surveys for electric vehicle integration
Research output: Scientific - peer-review › Article

An accurate small-signal model of a three-phase VSI-based photovoltaic inverter with LCL-filter
Research output: Scientific - peer-review › Conference contribution

Appearance of a Drift Problem in Variable-step Perturbative MPPT Algorithms
Research output: Scientific - peer-review › Conference contribution

Closure to Discussion on "Effect of Multilevel Inverter Supply on Core Losses in Magnetic Materials and Electrical Machines"
Research output: Scientific - peer-review › Article

Comments on An Efficient Partial Power Processing DC/DC Converter for Distributed PV Architectures
Research output: Scientific - peer-review › Article

Designing Inter-Organizational SA System to Disturbances of Electricity Supply
Research output: Professional › Working paper

Dielectric Breakdown Strength of Thermally Sprayed Ceramic Coatings: Effects of Different Test Arrangements
Research output: Scientific - peer-review › Article

Dynamic characteristics of three-phase Z-source-based photovoltaic inverter with asymmetric impedance network
Research output: Scientific - peer-review › Conference contribution

Effect of active damping on the output impedance of PV inverter
Research output: Scientific - peer-review › Conference contribution

Harmonic and Imbalance Voltage Mitigation in Smart Grids: A DSTATCOM Based Solution
Research output: Scientific - peer-review › Conference contribution
Interfacing renewable energy sources for maximum power transfer - Part II: Dynamics
Research output: Scientific - peer-review › Article

On the Provision of Frequency Regulation in Low Inertia AC Grids Using HVDC Systems
Research output: Scientific - peer-review › Article

Principles of designing for situation awareness
Haapanen, J. 2015 Tampere: Maanpuolustuskorkeakoulu Sotatekniikan laitos, p. 29-46 (Situational awareness for critical infrastructure protection; vol. 3, no. 1)
Research output: Professional › Working paper

Single-source multi-battery solar charger: Analysis and stability issues
Research output: Scientific - peer-review › Article

Smart Grids with Large-Scale Implementation of Automatic Meter Reading: Experiences from Finland
Research output: Scientific - peer-review › Chapter

MO Surge Arresters Stresses and Test Procedures: CIGRE Technical Brochure, WG A3.17
Research output: Professional › Commissioned report