Research outputs:

**Adaptive entropy-based learning with dynamic artificial neural network**
Research output: Contribution to journal › Journal article – Annual report year: 2019 › Research › peer-review

**Dynamic pricing for demand response considering market price uncertainty**
Research output: Contribution to journal › Journal article – Annual report year: 2017 › Research › peer-review

**Adaptive Portfolio Optimization for Multiple Electricity Markets Participation**
Research output: Contribution to journal › Journal article – Annual report year: 2016 › Research › peer-review

**Electricity Markets Ontology to Support MASCEM’s Simulations**
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2016 › Research › peer-review

**Energy Optimization for Distributed Energy Resources Scheduling with Enhancements in Voltage Stability Margin**
Research output: Contribution to journal › Journal article – Annual report year: 2016 › Research › peer-review

**Evaluation of different initial solution algorithms to be used in the heuristics optimization to solve the energy resource scheduling in smart grids**
Research output: Contribution to journal › Journal article – Annual report year: 2016 › Research › peer-review

**Metalearning to support competitive electricity market players’ strategic bidding**
Research output: Contribution to journal › Journal article – Annual report year: 2017 › Research › peer-review

**Multi-agent based modeling for electric vehicle integration in a distribution network operation**
Research output: Contribution to journal › Journal article – Annual report year: 2016 › Research › peer-review

**Simulated annealing to handle energy and ancillary services joint management considering electric vehicles**
Research output: Contribution to journal › Journal article – Annual report year: 2016 › Research › peer-review

**Agent-Based Smart Grid Market Simulation with Connection to Real Infrastructures**
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2015 › Research › peer-review
A multi-objective optimization of the active and reactive resource scheduling at a distribution level in a smart grid context
Research output: Contribution to journal › Journal article – Annual report year: 2015 › Research › peer-review

Analysis of Strategic Wind Power Participation in Energy Market using MASCEM simulator
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2015 › Research › peer-review

Coalition of distributed generation units to virtual power players - a game theory approach
Research output: Contribution to journal › Journal article – Annual report year: 2015 › Research › peer-review

Cost allocation model for distribution networks considering high penetration of distributed energy resources
Soares, T., Pereira, F., Morais, H. & Vale, Z., 2015, In : Electric Power Systems Research. 124, p. 120-132
Research output: Contribution to journal › Journal article – Annual report year: 2015 › Research › peer-review

Day-ahead distributed energy resource scheduling using differential search algorithm
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2015 › Research › peer-review

Distributed energy resources management using plug-in hybrid electric vehicles as a fuel-shifting demand response resource
Research output: Contribution to journal › Journal article – Annual report year: 2015 › Research › peer-review

Energy resource management under the influence of the weekend transition considering an intensive use of electric vehicles
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2015 › Research › peer-review

Incentive-based demand response programs designed by asset-light retail electricity providers for the day-ahead market
Research output: Contribution to journal › Journal article – Annual report year: 2015 › Research › peer-review

MASCEM: EPEX SPOT Day-Ahead market integration and simulation
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2015 › Research › peer-review

Multi-agent simulation of competitive electricity markets: Autonomous systems cooperation for European market modeling
Research output: Contribution to journal › Journal article – Annual report year: 2015 › Research › peer-review

Support Vector Machines for decision support in electricity markets' strategic bidding
Research output: Contribution to journal › Journal article – Annual report year: 2015 › Research › peer-review
Two-stage stochastic day-ahead optimal resource scheduling in a distribution network with intensive use of distributed energy resources
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2016 › Research › peer-review

A Communication and Resources Management Scheme to Support the Smart Grid Integration of Multiplayers Access to Resources Information
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2014 › Research › peer-review

Adaptive learning in agents behaviour: A framework for electricity markets simulation
Research output: Contribution to journal › Journal article – Annual report year: 2014 › Research › peer-review

A hybrid simulated annealing approach to handle energy resource management considering an intensive use of electric vehicles
Research output: Contribution to journal › Journal article – Annual report year: 2014 › Research › peer-review

Analysis of the Impact of Wind Power Participating in Both Energy and Ancillary Services Markets – The Danish Case
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2014 › Research › peer-review

A New Heuristic Providing an Effective Initial Solution for a Simulated Annealing approach to Energy Resource Scheduling in Smart Grids
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2014 › Research › peer-review

Automatic electricity markets data extraction for realistic multi-agent simulations
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2014 › Research › peer-review

Data Extraction Tool to Analyse, Transform and Store Real Data from Electricity Markets
Research output: Chapter in Book/Report/Conference proceeding › Book chapter – Annual report year: 2014 › Research › peer-review

Day-ahead resource scheduling including demand response for electric vehicles
Research output: Chapter in Book/Report/Conference proceeding › Conference abstract in proceedings – Annual report year: 2014 › Research › peer-review

Definition of Distribution Network Tariffs Considering Distribution Generation and Demand Response
Research output: Contribution to journal › Journal article – Annual report year: 2014 › Research › peer-review

Strategic Bidding for Electricity Markets Negotiation Using Support Vector Machines
Research output: Chapter in Book/Report/Conference proceeding › Book chapter – Annual report year: 2014 › Research › peer-review

SW-platform for R&D in Applications of Synchrophasor Measurements for Wide-Area Assessment, Control and Visualization in Real-Time
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2014 › Research › peer-review

Towards a unified European electricity market: The contribution of data-mining to support realistic simulation studies
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2014 › Research › peer-review

Application-Specific Modified Particle Swarm Optimization for energy resource scheduling considering vehicle-to-grid
Research output: Contribution to journal › Journal article – Annual report year: 2013 › Research › peer-review

Contextual Intelligent Load Management Considering Real Time Pricing in a Smart Grid Environment
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2013 › Research › peer-review

Day-Ahead Resource Scheduling Including Demand Response for Electric Vehicles
Research output: Contribution to journal › Journal article – Annual report year: 2013 › Research › peer-review

Decision support tool for Virtual Power Players: Hybrid Particle Swarm Optimization applied to Day-ahead Vehicle-To-Grid Scheduling
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2013 › Research › peer-review

Defining electricity tariffs using the knowledge about the consumers profiles in ELECON project
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2013 › Research › peer-review

Dispatch of distributed energy resources to provide energy and reserve in smart grids using a particle swarm optimization approach
Distributed Agent-based Intelligent System for Demand Response Program Simulation in the Scope of Smart Grids

Distribution Networks Management with High Penetration of Photovoltaic Panels

Distribution system operation supported by contextual energy resource management based on intelligent SCADA

Energy resources management in three distinct time horizons considering a large variation in wind power

Integration in MASCEM of the Joint Dispatch of Energy and Reserves Provided by Generation and Demand Resources

Intelligent micro grid management using a multi-agent approach

Intelligent remuneration and tariffs for virtual power players

Load Control Timescales Simulation in a Multi-Agent Smart Grid Platform

MASCEM Restructuring: Ontologies For Scenarios Generation in Power Systems Simulators

Maximizing the Social Welfare of Virtual Power Players Operation in Case of Excessive Wind Power
Modified discrete PSO to increase the delivered energy probability in distribution energy systems
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2013 › Research › peer-review

Modified Particle Swarm Optimization Applied to Integrated Demand Response and DG Resources Scheduling
Research output: Contribution to journal › Journal article – Annual report year: 2013 › Research › peer-review

Multi-agent approach for power system in a smart grid protection context
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2013 › Research › peer-review

Multi-Agent Based Smart Grid Management and Simulation: Situation Awareness and Learning in a Test Bed with Simulated and Real Installations and Players
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2013 › Research › peer-review

Multi-objective parallel particle swarm optimization for day-ahead Vehicle-to-Grid scheduling
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2013 › Research › peer-review

Reactive Power Management Strategies in Future Smart Grids
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2013 › Research › peer-review

Real-time simulation of energy management in a domestic consumer
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2013 › Research › peer-review

Real-Time Tariffs for Electric Vehicles in Wind Power based Power Systems
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2013 › Research › peer-review

SCADA house intelligent management for energy efficiency analysis in domestic consumers
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2013 › Research › peer-review

Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2013 › Research › peer-review
Smart grid market using joint energy and ancillary services bids
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2013 › Research › peer-review

Stochastic framework for strategic decision-making of load-serving entities for day-ahead market
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2013 › Research › peer-review

Stochastic Short-term Incentive-based Demand Response Scheduling of Load-serving Entities
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2013 › Research › peer-review

Stochastic short-term maintenance scheduling of GENCOs in an oligopolistic electricity market
Research output: Contribution to journal › Journal article – Annual report year: 2013 › Research › peer-review

Strategic bidding in electricity markets: An agent-based simulator with game theory for scenario analysis
Research output: Contribution to journal › Journal article – Annual report year: 2013 › Research › peer-review

Supervision functions - Secure operation of sustainable power systems
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2013 › Research › peer-review

Upper Ontology for Multi-Agent Energy Systems' Applications
Research output: Chapter in Book/Report/Conference proceeding › Book chapter – Annual report year: 2013 › Research › peer-review

Virtual Power Players Internal Negotiation and Management in MASCEM
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2013 › Research › peer-review