Research outputs:

**A two-layer game theoretical attack-defense model for a false data injection attack against power systems**
Research output: Research - peer-review › Journal article – Annual report year: 2018

**Investigation of real-time flexibility of combined heat and power plants in district heating applications**
Research output: Research - peer-review › Journal article – Annual report year: 2019

**A New Method for Handling Lockout Constraints on Controlled TCL Aggregations**
Research output: Research - peer-review › Article in proceedings – Annual report year: 2018

**An Experimental Setup for Investigating Flexibility of District Heating with Fuel Shift**
Cai, H., You, S. & Bindner, H. W. 2018
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2018

**Controlling entity ICT reference architecture: distributed control architecture for distributed systems**
Research output: Research - peer-review › Article in proceedings – Annual report year: 2018

**Decentralized Energy Management of Networked Microgrid Based on Alternating-Direction Multiplier Method**
Feng, C., Wen, F., Zhang, L., Xu, C., Salam, M. A. & You, S. 2018 In : Energies. 11, 10, 18 p., 2555
Research output: Research - peer-review › Journal article – Annual report year: 2018

**Demand side management in urban district heating networks**
Research output: Research - peer-review › Journal article – Annual report year: 2018

**Development of a data driven approach to explore the energy flexibility potential of building clusters**
Research output: Research - peer-review › Journal article – Annual report year: 2018

**Distributed Energy Resource ICT Reference Architecture: Distributed Control Architecture for Hardware Limited Internet of Things DERs**
Research output: Research - peer-review › Article in proceedings – Annual report year: 2018

**Exploring Potential of Energy Flexibility in Buildings for Energy System Services**
Research output: Research - peer-review › Journal article – Annual report year: 2018
Fuel shift for improving urban integrated energy system operation and efficiency
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Improving urban energy system operation with flexible heat and power coupling
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Integrated Planning of A Large-scale Heat Pump In View of Heat and Power Networks
Research output: Research - peer-review › Journal article – Annual report year: 2018

New Hybrid Control for Wide Input Full-bridge LLC Resonant DC/DC Converter
Research output: Research - peer-review › Article in proceedings – Annual report year: 2018

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Research output: Research - peer-review › Journal article – Annual report year: 2017

Smart grid communication infrastructure comparison-for distributed control of distributed energy resources using internet of things devices
Research output: Research - peer-review › Journal article – Annual report year: 2018

Technical assessment of electric heat boosters in low-temperature district heating based on combined heat and power analysis
Research output: Research - peer-review › Journal article – Annual report year: 2018

Active and reactive power support of MV distribution systems using battery energy storage
Research output: Research - peer-review › Article in proceedings – Annual report year: 2017

Addressing the Conflict of Interest between Aggregators and DSOs in Deregulated Energy Markets
Research output: Research - peer-review › Article in proceedings – Annual report year: 2017

An evolving experience learned for modelling thermal dynamics of buildings from live experiments: the Flexhouse story: Power and Energy Systems Engineering
Research output: Research - peer-review › Conference article – Annual report year: 2017

A review of Danish integrated multi-energy system flexibility options for high wind power penetration
Research output: Research - peer-review › Journal article – Annual report year: 2017

A Unified Trading Model Based on Robust Optimization for Day-Ahead and Real-Time Markets with Wind Power Integration
Research output: Research - peer-review › Journal article – Annual report year: 2017
Controllability and stability of primary frequency control from thermostatic loads with delays
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Energylab Nordhavn: An integrated community energy system towards green heating and e-mobility
Research output: Research - peer-review › Article in proceedings – Annual report year: 2017

Enhancing wind power integration through optimal use of flexibility in multi-carrier energy systems from the Danish perspective
Research output: Research - peer-review › Journal article – Annual report year: 2017

Evaluating the cost of line capacity limitations in aggregations of commercial buildings
Research output: Research - peer-review › Article in proceedings – Annual report year: 2017

Integration of Electric Vehicles into the Power Distribution Network with a Modified Capacity Allocation Mechanism
Research output: Research - peer-review › Journal article – Annual report year: 2017

Load situation awareness design for integration in multi-energy system
Research output: Research - peer-review › Article in proceedings – Annual report year: 2017

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Research output: Research - peer-review › Article in proceedings – Annual report year: 2018

Optimal placement of a heat pump in an integrated power and heat energy system
Research output: Research - peer-review › Article in proceedings – Annual report year: 2017

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Research output: Research - peer-review › Article in proceedings – Annual report year: 2017

Smart grid communication comparison: distributed control middleware and serialization comparison for the Internet of Things
Research output: Research - peer-review › Article in proceedings – Annual report year: 2017

Smart Grid communication middleware comparison distributed control comparison for the Internet of Things
Research output: Research - peer-review › Article in proceedings – Annual report year: 2017
Smart Grid Serialization Comparison
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以用户为中心的新兴电力市场模式
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An Overview of Modeling Approaches Applied to Aggregation-Based Fleet Management and Integration of Plug-In Electric Vehicles†
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Challenges of Implementing economic model predictive control strategy for buildings interacting with smart energy systems
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Simulation platform developed to study and identify critical cases in a future smart grid
Research output: Research - peer-review › Article in proceedings – Annual report year: 2017

Situation awareness of active distribution network: roadmap, technologies, and bottlenecks
Research output: Research - peer-review › Journal article – Annual report year: 2016
Value Assessment of Distribution Network Reconfiguration: A Danish Case Study
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Value assessment of hydrogen-based electrical energy storage in view of electricity spot market
Research output: Research - peer-review › Journal article – Annual report year: 2016

A multi-agent system for distribution grid congestion management with electric vehicles
Research output: Research - peer-review › Journal article – Annual report year: 2015

Challenges of using model predictive control for active demand side management
Research output: Research - peer-review › Article in proceedings – Annual report year: 2015

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Research output: Research - peer-review › Article in proceedings – Annual report year: 2015

System Frequency as Information Carrier in AC Power Systems
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The Danish Perspective of Energy Internet: From Service-oriented Flexibility Trading to Integrated Design, Planning and Operation of Multiple Cross-sectoral Energy Systems
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Comparison of Algorithms for Control of Loads for Voltage Regulation
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Coordinated Charging of Electric Vehicles for Congestion Prevention in the Distribution Grid
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Load kick-back effects due to activation of demand response in view of distribution grid operation.
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Research output: Research - peer-review › Book chapter – Annual report year: 2014

Optimal Dispatch of an Industrial Microgrid with a Mixed Portfolio of Distributed Energy Resources
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Technical feasibility study of Voltage Optimization Unit: Technical evaluation of distribution transformer with single phase on load tap changer for increasing hosting capacity of photovoltaic
Research output: Research - peer-review › Report – Annual report year: 2014

Analytical Framework for Market-oriented DSR Flexibility Integration and Management
Research output: Research - peer-review › Journal article – Annual report year: 2013

Developing the multi-level functioning interface framework for DER models
Research output: Research - peer-review › Book chapter – Annual report year: 2013

Efficient identification of opportunities for Distributed Generation based on Smart Grid Technology
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Optimization and control method for smart charging of EVs facilitated by Fleet operator: Review and classification
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Real-time measurements and their effects on state estimation of distribution power system
Research output: Research - peer-review » Article in proceedings – Annual report year: 2013

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Research output: Research - peer-review » Article in proceedings – Annual report year: 2013

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Research output: Research - peer-review » Article in proceedings – Annual report year: 2012

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Indirect Control for Demand Side Management – A Conceptual Introduction
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Numerical Comparison of Optimal Charging Schemes for Electric Vehicles
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Prediction and optimization methods for electric vehicle charging schedules in the EDISON project
Research output: Research - peer-review » Article in proceedings – Annual report year: 2012
Economic Dispatch of Electric Energy Storage with Multi-service Provision
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Generic modelling framework for economic analysis of battery systems
Research output: Research - peer-review › Article in proceedings – Annual report year: 2011

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Research output: Research - peer-review › Article in proceedings – Annual report year: 2011

Optimal Charge control of Electric Vehicles in Electricity Markets
Research output: Research - peer-review › Article in proceedings – Annual report year: 2011

Optimal charging schedule of an electric vehicle fleet
Research output: Research - peer-review › Article in proceedings – Annual report year: 2011

Developing Virtual Power Plant for Optimized Distributed Energy Resources Operation and Integration
Research output: Research › Ph.D. thesis – Annual report year: 2011

A Market-Based Virtual Power Plant
Research output: Research - peer-review › Article in proceedings – Annual report year: 2009

A study on electricity export capability of the μCHP system with spot price
Research output: Research - peer-review › Article in proceedings – Annual report year: 2009

Generic Virtual Power Plants: Management of Distributed Energy Resources under Liberalized Electricity Market
Research output: Research - peer-review › Article in proceedings – Annual report year: 2009

Offshore windfarm connection with low frequency AC transmission technology
Research output: Research - peer-review › Article in proceedings – Annual report year: 2009

EcoGrid.dk Phase 1: WP 2 System architecture
Research output: Research › Report – Annual report year: 2008

Valuation of FACTS for managing congestion in combined pool and bilateral markets
Research output: Research - peer-review › Article in proceedings – Annual report year: 2007
Projects:

**SPGC: Secure Power Grid Control**
Zong, Y., Træholt, C. & You, S.
01/12/2017 → 31/05/2020
Project: Research

**EPIMES: Enhancing wind Power Integration through optimal use of cross-sectoral flexibility in an integrated Multi-Energy System**
Bindner, H. W., Zong, Y., You, S., Zhang, Z. & Chyhryn, S.
01/10/2016 → 30/09/2019
Project: Research

**Modelling and Control of Multi-Energy System for Wind Power Integration**
Chyhryn, S., Bindner, H. W., You, S. & Zong, Y.
Forskningsrådsfinansiering
01/04/2017 → 31/03/2020
Project: PhD

**Integration of Gas, District Heating and the Electric Power Systems - Integrated Simulation Framework**
Wang, J., Træholt, C., You, S. & Zong, Y.
Privatist
15/12/2016 → 14/12/2019
Project: PhD

**Situation-aware control solutions for enabling smart network services**
Cai, H., Bindner, H. W. & You, S.
Eksternt finansieret virksomhed
01/10/2016 → 30/09/2019
Project: PhD

**Tool Sets for System Operators in Future Market Setting**
Heinrich, C., Bindner, H. W. & You, S.
Samfinansieret - Andet
15/09/2016 → 25/04/2020
Project: PhD

**Advanced Design Methods for Active Distribution Networks**
Klyapovskiy, S., Bindner, H. W. & You, S.
Samfinansieret - Andet
01/05/2016 → 30/04/2019
Project: PhD

**Toolsets development for DER aggregators providing concurrent services**
Ziras, C., Bindner, H. W. & You, S.
Offentlig finansiering
01/04/2016 → 31/03/2019
Project: PhD

**Reference architecture and infrastructure for modularity-based distributed control**
Petersen, B. S., Bindner, H. W., Poulsen, B., You, S., Andersen, P. B., Deconinck, G., Olsen, J. L. & Olsen, J. L.
Samfinansieret - Andet
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Project: PhD
Generic Virtual Power Plant for Micro Combined Heat and Power Units
You, S., Træholt, C., Poulsen, B., Rasmussen, C. N., Kempton, W., Mølbak, T. & Mølbak, T.
DTU, Samfinansiering
01/10/2007 → 23/03/2011
Project: PhD

ELN: EnergyLab Nordhavn - New Urban Energy Infrastructures
01/04/2015 → 31/03/2019
Project: Research

STATOIL project: The microgrid with wind and storage systems to supply reliable power for oil/gas platforms
Zong, Y. & You, S.
01/09/2015 → 31/12/2016
Project: Research

PROAIN: PROActive INtegration of sustainable energy resources enabling active distribution networks
Petersen, B. S., Poulsen, B., Bindner, H. W. & You, S.
01/01/2014 → 31/12/2017
Project: Research

EcoGrid: EcoGrid DK: 50% wind power in the Danish Electric Power System
Forsk. Private danske - Andre
01/05/2007 → 01/07/2008
Project: Research