Peder Bacher - DTU Orbit (04/03/2019)

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Research outputs:

**Estimating the influence of rebound effects on the energy-saving potential in building stocks**
Research output: Research - peer-review › Journal article – Annual report year: 2018

**Semi-dispatchable generation with wind-photovoltaic-fuel cell hybrid system to mitigate frequency disturbance**
Research output: Research - peer-review › Journal article – Annual report year: 2018

**A cross-disciplinary path to healthy and energy efficient buildings**
Research output: Research - peer-review › Journal article – Annual report year: 2018

**Probabilistic forecast algorithms for grid control D82.3**
Research output: Research › Report – Annual report year: 2018

**Online short-term forecast of greenhouse heat load using a weather forecast service**
Research output: Research - peer-review › Journal article – Annual report year: 2017

**Determination of thermal characteristics of standard and improved hollow concrete blocks using different measurement techniques**
Research output: Research - peer-review › Journal article – Annual report year: 2017

**Multi-site solar power forecasting using gradient boosted regression trees**
Research output: Research - peer-review › Journal article – Annual report year: 2017

**On site characterisation of the overall heat loss coefficient: comparison of different assessment methods by a blind validation exercise on a round robin test box**
Research output: Research - peer-review › Journal article – Annual report year: 2018

**skoleklima.dk – A platform to monitor air quality and thermal comfort in classrooms, developed for teachers and students**
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2017

**Stochastic model of wind-fuel cell for a semi-dispatchable power generation**
Research output: Research - peer-review › Journal article – Annual report year: 2017

**Load forecasting of supermarket refrigeration**
Research output: Research - peer-review › Journal article – Annual report year: 2015
Non-parametric method for separating domestic hot water heating spikes and space heating
Research output: Research - peer-review › Journal article – Annual report year: 2016

Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2016

Characterising the Actual Thermal Performance of Buildings: Current Results of Common Exercises Performed in the Framework of the IEA EBC Annex 58-Project
Research output: Research - peer-review › Conference article – Annual report year: 2015

Integrated energy systems modelling
Research output: Research - peer-review › Book chapter – Annual report year: 2015

Introduction to Statistics - eNotes
Research output: Education › Net publication - Internet publication – Annual report year: 2015

Methodology and forecast products for the optimal offering of ancillary services from wind in a market environment
Research output: Research › Report – Annual report year: 2015

Thermal Performance Characterization using Time Series Data - IEA EBC Annex 58 Guidelines
Research output: Research › Report – Annual report year: 2015

IEA Common Exercise 4: ARX, ARMAX and grey-box models for thermal performance characterization of the test box
Research output: Research › Report – Annual report year: 2014

Setting up and validating a complex model for a simple homogeneous wall
Research output: Research › Journal article – Annual report year: 2014

A non-parametric method for correction of global radiation observations
Research output: Research - peer-review › Journal article – Annual report year: 2013

Grey-box Modeling for System Identification of Household Refrigerators: a Step Toward Smart Appliances
Research output: Research - peer-review › Article in proceedings – Annual report year: 2013

Load forecasting for supermarket refrigeration
Research output: Research › Report – Annual report year: 2013

Online load forecasting for supermarket refrigeration
Research output: Research - peer-review › Article in proceedings – Annual report year: 2013

Online short-term heat load forecasting for single family houses
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

Short-term heat load forecasting for single family houses
Research output: Research - peer-review › Journal article – Annual report year: 2013

Solar/electric heating systems for the future energy system
Research output: Research - peer-review › Report – Annual report year: 2013
An improved dynamic test method for solar collectors
Research output: Research - peer-review › Journal article – Annual report year: 2012

Center for Bygningssimulering: Idegrundlag for etablering af center
Research output: Research › Report – Annual report year: 2012

Load Forecasting for Households
Research output: Research - peer-review › Report – Annual report year: 2012

Modelling the heat dynamics of a monitored Test Reference Environment for Building Integrated Photovoltaic systems using stochastic differential equations
Research output: Research - peer-review › Journal article – Annual report year: 2012

Model predictive control for a smart solar tank based on weather and consumption forecasts
Research output: Research - peer-review › Conference article – Annual report year: 2012

Models for efficient integration of solar energy
Research output: Research › Ph.D. thesis – Annual report year: 2012

Identifying suitable models for the heat dynamics of buildings
Research output: Research - peer-review › Journal article – Annual report year: 2011

Improved experimental setup for observation of non-linear heat dynamics
Research output: Research - peer-review › Article in proceedings – Annual report year: 2011

Models of the heat dynamics of solar collectors for performance testing
Research output: Research - peer-review › Article in proceedings – Annual report year: 2011

Online Short-term Solar Power Forecasting
Research output: Research - peer-review › Article in proceedings – Annual report year: 2011

Online Short-term Solar Power Forecasting
Research output: Research - peer-review › Poster – Annual report year: 2011

Opensource Software for MLR-Modelling of Solar Collectors
Research output: Research - peer-review › Article in proceedings – Annual report year: 2011

Short-Term Solar Collector Power Forecasting
Research output: Research - peer-review › Article in proceedings – Annual report year: 2011

Analysis of energy consumption in single family houses
Research output: Research › Article in proceedings – Annual report year: 2010

Data for Energy Performance Analysis: Financed by The Danish Electricity Saving Trust
Research output: Research › Report – Annual report year: 2010

Experiments and Data for Building Energy Performance Analysis: Financed by The Danish Electricity Saving Trust
Research output: Research › Report – Annual report year: 2010

Mathematical and Statistical Models and Methods for Describing the Thermal Characteristics of Buildings
Research output: Research › Article in proceedings – Annual report year: 2010
Models for Energy Performance Analysis: Financed by The Danish Electricity Saving Trust
Research output: Research › Report – Annual report year: 2010

Non-linear phenomena in greybox-modeling of heat dynamics in buildings
Research output: Research › Article in proceedings – Annual report year: 2010

Procedure for identifying models for the heat dynamics of buildings: Financed by The Danish Electricity Saving Trust and Vind i Øresund - Interreg 4A
Research output: Research - peer-review › Report – Annual report year: 2010

Statistical models describing the energy signature of buildings
Research output: Research › Article in proceedings – Annual report year: 2010

Matematisk modellering af klima og energi
Research output: Education - peer-review › Book chapter – Annual report year: 2009

Online short-term solar power forecasting
Research output: Research - peer-review › Journal article – Annual report year: 2009

Projects:

Stochastic Differential Equations for Modeling Energy Systems Integration
Project: PhD

Decision support by optimization and simulation of households and SMEs in energy systems
Project: PhD

Democratizing energy markets through the introduction of innovative flexibility-based demand response tools and novel business and market models for energy cooperatives
Project: Research

Datadriven models for energy advising leading to behavioural changes in SMEs and residences
Project: PhD

Models for efficient integration of solar energy
Project: PhD

CITS - Copenhagen ITS
Project: Research

Solar/electric heating systems in the future energy system
Project: Research