Jesper Ahrenfeldt - Research outputs - DTU Orbit (21/10/2019)

Co-processing of wood and wheat straw derived pyrolysis oils with FCC feed—Product distribution and effect of deoxygenation
Research output: Contribution to journal › Journal article – Annual report year: 2020 › Research › peer-review

Adsorption and decomposition of tar model compounds over the surface of gasification char and active carbon within the temperature range 250-800 °C
Research output: Contribution to journal › Journal article – Annual report year: 2019 › Research › peer-review

Bioøkonomiens maskinrum. DTU Sektorudviklingsrapport
Research output: Book/Report › Report – Annual report year: 2019 › Research

Catalytic deoxygenation of vapors obtained from ablative fast pyrolysis of wheat straw using mesoporous HZSM-5
Research output: Contribution to journal › Journal article – Annual report year: 2019 › Research › peer-review

Deoxygenation of wheat straw fast pyrolysis vapors using HZSM-5, Al2O3, HZSM-5/Al2O3 extrudates, and desilicated HZSM-5/Al2O3 extrudates
Research output: Contribution to journal › Journal article – Annual report year: 2019 › Research › peer-review

First injera baking biomass gasifier stove to reduce indoor air pollution, and fuel use
Research output: Contribution to journal › Journal article – Annual report year: 2019 › Research › peer-review

Flexible TwoStage biomass gasifier designs for polygeneration operation
Research output: Contribution to journal › Journal article – Annual report year: 2019 › Research › peer-review

From wood chips to pellets to milled pellets: The mechanical processing pathway of Austrian pine and European beech
Research output: Contribution to journal › Journal article – Annual report year: 2019 › Research › peer-review

Impact of ZSM-5 Deactivation on Bio-Oil Quality during Upgrading of Straw Derived Pyrolysis Vapors
Research output: Contribution to journal › Journal article – Annual report year: 2019 › Research › peer-review

Pyrolysis and Gasification of Lignocellulosic Biomass
Research output: Chapter in Book/Report/Conference proceeding › Book chapter – Annual report year: 2019 › Research › peer-review
Solid oxide fuel cell stack coupled with an oxygen-blown TwoStage gasifier using minimal gas cleaning
Research output: Contribution to journal › Journal article – Annual report year: 2019 › Research › peer-review

Activity of chars and activated carbons for removal and decomposition of tar model compounds – A review
Research output: Contribution to journal › Journal article – Annual report year: 2018 › Research › peer-review

A slurry drying plant, a method for drying slurry and use of a slurry drying plant
Research output: Patent › Patent – Annual report year: 2018 › Research

Characterization and assessment of PAH content in spent char to be used for soil amendment and carbon sequestration
Research output: Contribution to conference › Poster – Annual report year: 2018 › Research › peer-review

Combustion Behavior of Single Particles of Raw Wood and Pelletized Wood
Research output: Contribution to conference › Poster – Annual report year: 2018 › Research › peer-review

From Wood Chips to Pellets to Milled Pellets: the Mechanical Processing Pathway of Wood
Research output: Contribution to conference › Poster – Annual report year: 2018 › Research › peer-review

Optimizing catalytic tar-deoxygenation of fast pyrolysis vapors
Research output: Conference abstract for conference – Annual report year: 2018 › Research › peer-review

Oxygen-blown operation of the TwoStage Viking gasifier
Research output: Contribution to journal › Journal article – Annual report year: 2018 › Research › peer-review

Performance of mesoporous ZSM-5 for the upgrading of straw derived pyrolysis vapors
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 2018 › Research › peer-review

Performance of mesoporous ZSM-5 in deoxygenation of straw derived pyrolysis vapors
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 2018 › Research › peer-review

Performance of mesoporous ZSM-5 in deoxygenation of straw derived pyrolysis vapors
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 2018 › Research › peer-review

Residual Char from Gasification Integrated in a Tar Removal System
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2018 › Research › peer-review
Wood Pellet Milling Performance in a Suspension-Fired Power Plant
Research output: Contribution to conference › Poster – Annual report year: 2018 › Research › peer-review

Wood pellet milling tests in a suspension-fired power plant
Research output: Contribution to journal › Journal article – Annual report year: 2018 › Research › peer-review

Changes imposed by pyrolysis, thermal gasification and incineration on composition and phosphorus fertilizer quality of municipal sewage sludge
Research output: Contribution to journal › Journal article – Annual report year: 2017 › Research › peer-review

Clean Cook Stove Technology for Artisanal Palm Oil Clarification and Biochar Production in Ghana
Research output: Contribution to conference › Paper – Annual report year: 2018 › Research

Comparison of phosphorus recovery from incineration and gasification sewage sludge ash
Research output: Contribution to journal › Journal article – Annual report year: 2017 › Research › peer-review

Full-scale Milling Tests of Wood Pellets for Combustion in a Suspension-Fired Power Plant Boiler
Research output: Contribution to conference › Paper – Annual report year: 2017 › Research › peer-review

Green Cohesive Agricultural Resource Management - The WEBSOC Project
Research output: Contribution to conference › Poster – Annual report year: 2018 › Research

Low temperature circulating fluidized bed gasification and co-gasification of municipal sewage sludge. Part 1: Process performance and gas product characterization
Research output: Contribution to journal › Journal article – Annual report year: 2017 › Research › peer-review

Low temperature circulating fluidized bed gasification and co-gasification of municipal sewage sludge. Part 2: Evaluation of ash materials as phosphorus fertilizer
Research output: Contribution to journal › Journal article – Annual report year: 2017 › Research › peer-review

Optimizing catalytic deoxygenation of biomass derived fast pyrolysis vapors
Research output: Chapter in Book/Report/Conference proceeding › Conference abstract in proceedings – Annual report year: 2017 › Research › peer-review

Pelletization of torrefied biomass: a modelling approach
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 2018 › Research › peer-review
Plant Availability of Phosphorus in Five Gasification Biochars
Research output: Contribution to journal › Journal article – Annual report year: 2017 › Research › peer-review

Sequential electrodialytic recovery of phosphorus from low-temperature gasification ashes of chemically precipitated sewage sludge
Research output: Contribution to journal › Journal article – Annual report year: 2016 › Research › peer-review

Solid oxide fuel cells powered by biomass gasification for high efficiency power generation
Research output: Contribution to journal › Journal article – Annual report year: 2016 › Research › peer-review

Tar Removal from Biomass Producer Gas by Using Biochar
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2017 › Research › peer-review

Validation of a multiparameter model to investigate torrefied biomass pelletization behavior
Research output: Contribution to journal › Journal article – Annual report year: 2017 › Research › peer-review

Biokul og jordens frugtbarthed
Research output: Contribution to conference › Paper – Annual report year: 2016 › Communication

Comparison of phosphorus recovery from incineration and gasification sewage sludge ash
Research output: Contribution to conference › Paper – Annual report year: 2016 › Research › peer-review

Electrodialytic recovery of phosphorus from chemically precipitated sewage sludge ashes
Research output: Contribution to conference › Poster – Annual report year: 2016 › Research › peer-review

Electrodialytic recovery of phosphorus from chemically precipitated sewage sludge ashes
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 2016 › Research › peer-review

Energy recovery from water and food sector residual resources
Research output: Chapter in Book/Report/Conference proceeding › Report chapter – Annual report year: 2016 › Commissioned › peer-review

From a single pellet press to a bench scale pellet mill - Pelletizing six different biomass feedstocks
Research output: Contribution to journal › Journal article – Annual report year: 2016 › Research › peer-review
Pore-size distribution and compressibility of coarse sandy subsoil with added biochar
Research output: Contribution to journal › Journal article – Annual report year: 2016 › Research › peer-review

Climate effect of an integrated wheat production and bioenergy system with Low Temperature Circulating Fluidized Bed gasifier
Research output: Contribution to journal › Journal article – Annual report year: 2015 › Research › peer-review

Electrodialytic extraction of phosphorus from ash of low-temperature gasification of sewage sludge
Research output: Contribution to journal › Journal article – Annual report year: 2015 › Research › peer-review

Electrodialytic separation of phosphorus and heavy metals from sewage sludge ash
Research output: Contribution to conference › Poster – Annual report year: 2015 › Research

Experimental analysis of a solid oxide fuel cell stack coupled with biomass gasification
Research output: Chapter in Book/Report/Conference proceeding › Conference abstract in proceedings – Annual report year: 2015 › Research › peer-review

Forgasning og fremstilling af halmkoks
Research output: Contribution to conference › Paper – Annual report year: 2015 › Research

Gasification biochar as a valuable by-product for carbon sequestration and soil amendment
Research output: Contribution to journal › Journal article – Annual report year: 2015 › Research › peer-review

Integration of oxygen membranes for oxygen production in cement plants
Research output: Contribution to journal › Journal article – Annual report year: 2015 › Research › peer-review

Screening of various low-grade biomass materials for low temperature gasification: Method development and application
Research output: Contribution to journal › Journal article – Annual report year: 2015 › Research › peer-review

Trends in energy supply integration: Thermal and biological conversion of biomass and waste
Research output: Chapter in Book/Report/Conference proceeding › Book chapter – Annual report year: 2015 › Research › peer-review

Electrodialytic extraction of phosphorus from ash of low-temperature gasification of sewage sludge
Research output: Chapter in Book/Report/Conference proceeding › Conference abstract in proceedings – Annual report year: 2015 › Research › peer-review
Optimization of a multi-parameter model for biomass pelletization to investigate temperature dependence and to facilitate fast testing of pelletization behavior

Research output: Contribution to journal › Journal article – Annual report year: 2011 › Research › peer-review

Pelletizing Properties of Torrefied Biomass

Research output: Contribution to conference › Conference abstract for conference – Annual report year: 2011 › Research

Pelletizing properties of torrefied spruce

Research output: Contribution to journal › Journal article – Annual report year: 2011 › Research › peer-review

Production of methanol/DME from biomass: EFP06

Research output: Book/Report › Report – Annual report year: 2011 › Research › peer-review

The potential of pyrolysis technology in climate change mitigation – influence of process design and –parameters, simulated in SuperPro Designer Software

Research output: Book/Report › Report – Annual report year: 2011 › Research

Thermal transitions of the amorphous polymers in wheat straw

Research output: Contribution to journal › Journal article – Annual report year: 2011 › Research › peer-review

Thermodynamic analysis of small-scale dimethyl ether (DME) and methanol plants based on the efficient two-stage gasifier

Research output: Contribution to journal › Journal article – Annual report year: 2011 › Research › peer-review

Binding mechanisms in fuel pellets made from biomass

Research output: Contribution to conference › Poster – Annual report year: 2010 › Research

Bio-SNG potential assessment: Denmark 2020

Ahrenfeldt, J., Jørgensen, B. & Thomsen, T., 2010, Roskilde: Danmarks Tekniske Universitet, Risø Nationallaboratoriet for Bæredygtig Energi. 87 p. (Denmark. Forskningscenter Risoe. Risoe-R; No. 1754(EN)).
Research output: Book/Report › Report – Annual report year: 2010 › Research

Development and Test of a new Concept for Biomass Producer Gas Engines

Research output: Book/Report › Report – Annual report year: 2010 › Research
Formation, Decomposition and Cracking of Biomass Tars in Gasification
Research output: Book/Report › Report – Annual report year: 2005 › Research

Investigation of Continuous Gas Engine CHP Operation on Biomass Producer Gas
Research output: Contribution to journal › Journal article – Annual report year: 2006 › Research › peer-review

Langtidsforsøg med totrinsforgasseren "Viking"
Research output: Book/Report › Report – Annual report year: 2005 › Research

Pyrolysis of Pine Wood: Experiments and Theory
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2005 › Research

Pyrolysis of Pine Wood, Experiments and Theory
Research output: Contribution to conference › Poster – Annual report year: 2005 › Research

The thermal history of char as disclosed by carbon isotope ratios
Research output: Contribution to conference › Poster – Annual report year: 2005 › Research

Time resolved pyrolysis of char
Research output: Contribution to conference › Poster – Annual report year: 2005 › Research

CO Emissions from Gas Engines Operating on Biomass Producer Gas
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2004 › Research › peer-review

Status - 2000 Hours of Operation with the Viking Gasifier
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2004 › Research › peer-review

Upscale of the Two-Stage Gasification Process
CO and PAH Emissions from Engines Operating on Biomass Producer Gas

Combustion Chamber Deposits and PAH Formation in SI Engines Fueled by Producer Gas from Biomass Gasification


The Design, Construction and Operation of a 75 kW Two-Stage Gasifier

CO Emissions from Gas Engines Fueled by Producer Gas
Ahrenfeldt, J., Jensen, T. K. & Gøbel, B., 2002

High Performance Gasification with the Two-Stage Gasifier

Experiments with wood gas engines

Ford VSG 411 fueled by producer gas from a two-stage gasifier

Hydrocarbon emissions from an SI engine using different hydrogen-containing gaseous fuels
Application of a Bitumenous Fuel in a Diesel Engine
Research output: Contribution to journal › Journal article – Annual report year: 1999 › Research › peer-review

Ford VSG 411 Fuelled by Producer Gas from a Two-stage Gasifier
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 1999 › Research › peer-review

Totrinsforgasning, uge 47 1999: Forsøgsforløb, kondensat, tryktab over koksbed
Research output: Book/Report › Report – Annual report year: 2001 › Research