

Impact of Different Concrete Types on Radio Propagation  
Fundamentals and Practical RF Measurements

Artificial intelligence yesterday, today and tomorrow

Intelligent data service for farmers

Teaching for virtual work

GIS-data related route optimization, hierarchical clustering, location optimization, and kernel density methods are useful for promoting distributed bioenergy plant planning in rural areas

Impedance-based interactions in grid-tied three-phase inverters in renewable energy applications

Direct fixed-step maximum power point tracking algorithms with adaptive perturbation frequency

Combined experimental and theoretical study of acetylene semi-hydrogenation over Pd/Al<sub>2</sub>O<sub>3</sub>

Identification of three-phase grid impedance in the presence of parallel converters

Power electronics in renewable energy systems

Flux-Weakening Control for IPMSM Employing Model Order Reduction

Model Order Reduction of Bearingless Reluctance Motor Including Eccentricity

Quantification of bio-anode capacitance in bioelectrochemical systems using Electrochemical Impedance Spectroscopy

Automatic Meter Infrastructure (AMI) as a part of flexibility market

Comparison of innovation policies for electric vehicle business ecosystems

Effects of electric vehicles and heat pumps on long-term electricity consumption scenarios for rural areas in the nordic environment

Microgrids as part of electrical energy system - Pricing scheme for network tariff of DSO

Use case description of real-time control of microgrid flexibility

Alternative Power-Based Pricing Schemes for Distribution Network Tariff of Small Customers

Constrained Long-Horizon Direct Model Predictive Control for Synchronous Reluctance Motor Drives

A distributed automation architecture for distribution networks, from design to implementation

Lessons learnt from real-time monitoring of the low voltage distribution network

Efficient method for the real-time contingency analysis of meshed HVDC power grids fed by VSC stations

Mechanical stress analysis during a quench in CLIQ protected 16 T dipole magnets designed for the future circular collider

Improved modelling of electric loads for enabling demand response by applying physical and data-driven models  
Project Response

Online dynamic conductance estimation based maximum power point tracking of photovoltaic generators

Sustainable electric vehicle - Prosumer framework and policy mix

Inoculum pretreatment differentially affects the active microbial community performing mesophilic and thermophilic dark fermentation of xylose

Coordinated voltage control as a replacement for passive network reinforcements-A case study

A new method to assess the contribution of VSC-HVDC connected wind farms to the primary frequency control of power networks

A novel strategy for optimal placement of locally controlled voltage regulators in traditional distribution systems

Dynamic modeling and analysis of PCM-controlled DCM-operating buck converters-A reexamination

Thermophilic versus mesophilic dark fermentation in xylose-fed fluidised bed reactors  
Biohydrogen production and active microbial community

Effect of hydraulic retention time on continuous electricity production from xylose in up-flow microbial fuel cell

Real-time hardware- and software-in-the-loop simulation of decentralised distribution network control architecture

Exhaust emissions of non-road mobile machine  
Real-world and laboratory studies with diesel and HVO fuels

Electropolymerized polyazulene as active material in flexible supercapacitors

Aspects of advancement of distribution tariffs for small consumers in Finland

Attractiveness of demand response in the Nordic electricity market - Present state and future prospects

Development options for distribution tariff structures in Finland

Understanding consumers' renewable energy behaviour beyond 'homo economicus'  
An exploratory survey in four European countries

The effects of calcium and potassium on CO<sub>2</sub> gasification of birch wood in a fluidized bed

The IDE4L Project  
Defining, Designing, and Demonstrating the Ideal Grid for All

Determining maximum MPP-tracking sampling frequency for input-voltage-controlled PV-interfacing converter

Cavitation erosion, slurry erosion and solid particle erosion performance of metal matrix composite (MMC) coatings sprayed with modern high velocity thermal spray processes

Particle emissions characterization from a medium-speed marine diesel engine with two fuels at different sampling conditions

A Unified Modeling Approach of Multi-Terminal VSC-HVDC Links for Dynamic Simulations of Large-Scale Power Systems

Elimination of arsenic-containing emissions from gasification of chromated copper arsenate wood

Power flow solutions of AC/DC micro-grid structures

Comparison of photovoltaic and wind generators as dynamic input sources to power processing interfaces

Cost-causation based approach in forming power-based distribution network tariff for small customers

Network impacts of distribution power tariff schemes with active customers

The role of residential prosumers initiating the energy innovation ecosystem to future flexible energy system

A generalized frame of reference for the incorporation of, multi-terminal VSC-HVDC systems in power flow solutions

Modeling of the catalytic effects of potassium and calcium on spruce wood gasification in CO<sub>2</sub>

The formation and physical properties of the particle emissions from a natural gas engine

Suboptimal search strategies with bounded computational complexity to solve long-horizon direct model predictive control problems

Searching for a robust strategy for minimizing alkali chlorides in fluidized bed boilers during burning of high SRF-energy-share fuel

Low-Voltage DC Distribution-Utilization Potential in a Large Distribution Network Company

Improved adaptive input voltage control of a solar array interfacing current mode controlled boost power stage

A real-time electrically controlled active matching circuit utilizing genetic algorithms for biomedical WPT applications

Catalytic effect of Ca and K on CO<sub>2</sub> gasification of spruce wood char

Effect of Multilevel Inverter Supply on Core Losses in Magnetic Materials and Electrical Machines

A novel VSC-HVDC link model for dynamic power system simulations

Driving pattern analysis of Nordic region based on National Travel Surveys for electric vehicle integration

Enquête de la variabilité cycle-à-cycle du NO dans la combustion homogène

Translated title of the contribution: : Investigation of cycle-to-cycle variability of NO in homogeneous combustion

On the benefit of long-horizon direct model predictive control for drives with LC filters

Reformulation of the long-horizon direct model predictive control problem to reduce the computational effort

Variable Switching Point Predictive Torque Control of Induction Machines

Bioprocessing of enhanced cellulase production from a mutant of *Trichoderma asperellum* RCK2011 and its application in hydrolysis of cellulose

Inhibitory effects of substrate and soluble end products on biohydrogen production of the alkalithermophile *Caloramator celer*

Kinetic, metabolic and transcription analyses

Comparison of finite-element-based state-space models for PM synchronous machines

Design driven world of cellulose-from bulk to luxury?

Nickel-based HVOF coatings promoting high temperature corrosion resistance of biomass-fired power plant boilers

Direct model predictive current control strategy of DC-DC boost converters

Non-sterile process for biohydrogen and 1,3-propanediol production from raw glycerol

Prospecting hydrogen production of *Escherichia coli* by metabolic network modeling

Model predictive control of the interleaved DC-DC boost converter with coupled inductors

Variable switching point predictive torque control for the three-level neutral point clamped inverter

Mismatch losses in PV power generators caused by partial shading due to clouds

Model predictive control of the internal voltages of a five-level active neutral point clamped converter

Model predictive pulse pattern control for the five-level active neutral point clamped inverter

Impact of biodiesel application at various blending ratios on passenger cars of different fueling technologies

Hydrogen and methane yields of untreated, water-extracted and acid (HCl) treated maize in one- and two-stage batch assays

Trace compounds affecting biogas energy utilisation - A review

Power flow initialisation of dynamic studies with induction motor loads

Manganese-cobalt spinel coatings for SOFC metallic interconnects manufactured by conventional plasma spraying (PS) and suspension plasma spraying (SPS)

Modeling the effect of inverter supply on eddy-current losses in synchronous machines

Trace compounds of biogas from different biogas production plants

Input Invariance as a Method to Reduce EMI Filter Interactions in Telecom DPS Systems

The effects of intermittent charging on VRLA battery life expectancy in telecom applications

Use of unterminated two-port modeling technique in analysis of input filter interactions in telecom DPS systems

AC-UPS reliability and availability performance  
Comparison of available solutions

Theoretical studies of structural properties of the high- $T_c$  superconductor  $Y_1Ba_2Cu_3O_{7-x}$