Michael A. E. Andersen - DTU Orbit (13/05/2019)

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Research outputs:

A 10 MHz GaNFET Based Isolated High Step-Down DC-DC Converter: Design and Magnetics Investigation
Research output: Contribution to journal › Journal article – Annual report year: 2019 › Research › peer-review

A Comparison Review of the Resonant Gate Driver in the Silicon MOSFET and the GaN Transistor Application
Research output: Contribution to journal › Journal article – Annual report year: 2019 › Research › peer-review

Multi-physic Analysis for GaN Transistor PCB Layout
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2019 › Research › peer-review

Partial Parallel Dual Active Bridge Converter with Variable Voltage Gain for SOEC/SOFC System
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2019 › Research › peer-review

A 10 MHz GaNFET Based Isolated High Step-Down DC-DC Converter
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2018 › Research › peer-review

Analysis and Comparison of dc/dc Topologies in Partial Power Processing Configuration for Energy Storage Systems
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2018 › Research › peer-review

Analysis and Design of a dc–dc Converter Using Visual Aid
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2018 › Research › peer-review

An improved partially interleaved transformer structure for high-voltage high-frequency multiple-output applications
Research output: Contribution to journal › Journal article – Annual report year: 2017 › Research › peer-review

Higher power density amplifiers
Research output: Contribution to journal › Journal article – Annual report year: 2019 › Research › peer-review

High Frequency LLC Resonant Converter with Magnetic Shunt Integrated Planar Transformer
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2018 › Research › peer-review
High Frequency LLC Resonant Converter with Magnetic Shunt Integrated Planar Transformer
Research output: Contribution to journal › Journal article – Annual report year: 2018 › Research › peer-review

High Frequency Wide Output Range Boost-Flyback Converter with Zero Voltage Switching
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2018 › Research › peer-review

High Voltage Gain Dual Active Bridge Converter with an Extended Operation Range for Renewable Energy Systems
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2018 › Research › peer-review

Improved Analysis and Modelling of Leakage Inductance for Planar Transformers
Research output: Contribution to journal › Journal article – Annual report year: 2018 › Research › peer-review

Improved Analysis and Modelling of Leakage Inductance for Planar Transformers
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2018 › Research › peer-review

Loss Analysis of GaN Based Partial Parallel Isolated Bidirectional Full Bridge Boost Converter
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2018 › Research › peer-review

Multilevel tracking power supply for switch-mode audio power amplifiers
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2018 › Research › peer-review

Optimal control of a high-frequency class-D amplifier
Research output: Contribution to journal › Journal article – Annual report year: 2018 › Research › peer-review

PCB Embedded Inductor for High-Frequency ZVS SEPIC Converter
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2018 › Research › peer-review

Power Flow Models of GaN Based Partial Parallel Dual Active Bridge (P2DAB) DC-DC Converter
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2018 › Research › peer-review

Power Plateau and Anti-Power Phenomenon of Dual Active Bridge Converter with Phase-Shift Modulation
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2018 › Research › peer-review

Research of Low Inductance Loop Design in GaN HEMT Application
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2018 › Research › peer-review

Review of Resonant Gate Driver in Power Conversion
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2018 › Research › peer-review

Switching Transient Analysis and Characterization of GaN HEMT
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2018 › Research › peer-review
Towards higher power density amplifiers
Research output: Contribution to journal › Journal article – Annual report year: 2019 › Research › peer-review

Resonant power converter with dead-time control of synchronous rectification circuit
Research output: Patent › Patent – Annual report year: 2017 › Research

Analysis and Modeling of Integrated Magnetics for LLC resonant Converters
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2017 › Research › peer-review

Analysis and optimisation of coupled winding in magnetic resonant wireless power transfer systems with orthogonal experiment results
Research output: Contribution to journal › Conference article – Annual report year: 2017 › Research › peer-review

Analysis and optimization of coupled windings in magnetic resonant wireless power transfer systems with orthogonal experiment method
Research output: Contribution to journal › Journal article – Annual report year: 2018 › Research › peer-review

Analysis, Design, Modeling, and Control of an Interleaved-Boost Full-Bridge Three-Port Converter for Hybrid Renewable Energy Systems
Research output: Contribution to journal › Journal article – Annual report year: 2016 › Research › peer-review

Analytical Comparison of Dual-Input Isolated dc-dc Converter with an ac or dc Inductor for Renewable Energy Systems
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2017 › Research › peer-review

An improved partially interleaved transformer structure for high-voltage high-frequency multiple-output applications
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2018 › Research › peer-review

Construction of Lightweight Loudspeaker Enclosures
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2017 › Research › peer-review

Optimum phase shift in the self-oscillating loop for piezoelectric transformer-based power converters
Research output: Contribution to journal › Journal article – Annual report year: 2018 › Research › peer-review

Piezoelectric transformers: Control
Research output: Non-textual form › Sound/Visual production (digital) – Annual report year: 2017 › Research › peer-review

Review of High Efficiency Bidirectional dc-dc Topologies with High Voltage Gain
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2017 › Research › peer-review

Accelerometer Based Motional Feedback Integrated in a 2 3/4" Loudspeaker
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2016 › Research › peer-review

Analysis of bi-directional piezoelectric-based converters for zero-voltage switching operation
Research output: Contribution to journal › Journal article – Annual report year: 2016 › Research › peer-review

Class-D amplifier design and performance for driving a Piezo Actuator Drive servomotor.
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2016 › Research › peer-review
Comparative Evaluation of the Loss and Thermal Performance of Advanced Three Level Inverter Topologies
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2016 › Research › peer-review
Comparative Evaluation of the Loss and Thermal Performance of Advanced Three Level Inverter Topologies
Research output: Contribution to journal › Journal article – Annual report year: 2016 › Research › peer-review
Comparison of Simple Self-Oscillating PWM Modulators
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2016 › Research › peer-review
Design of Efficient Sound Systems for Low Voltage Battery Driven Applications
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2016 › Research › peer-review
Digital Control of a High Voltage (2.5 kV) Bidirectional Flyback DC-DC Converter for Driving a Capacitive Incremental Actuator
Research output: Contribution to journal › Journal article – Annual report year: 2016 › Research › peer-review
Digitized self-oscillating loop for piezoelectric transformer-based power converters
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2016 › Research › peer-review
Dynamic optimum dead time in piezoelectric transformer-based switch-mode power supplies
Research output: Contribution to journal › Journal article – Annual report year: 2016 › Research › peer-review
Efficiency of Switch-Mode Power Audio Amplifiers - Test Signals and Measurement Techniques
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2016 › Research › peer-review
Efficiency Study of Vertical Distance Variations in Wireless Power Transfer for E-Mobility
Research output: Contribution to journal › Journal article – Annual report year: 2016 › Research › peer-review
EMC Investigation of a Very High Frequency Self-oscillating Resonant Power Converter
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2016 › Research › peer-review
Grid-connected Photovoltaic Micro-inverter with New Hybrid Control LLC Resonant Converter
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2016 › Research › peer-review
High Dynamic Performance Nonlinear Source Emulator
Research output: Contribution to journal › Journal article – Annual report year: 2016 › Research › peer-review
High Frequency AC Inductor Analysis and Design for Dual Active Bridge (DAB) Converters
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2016 › Research › peer-review
Integrated Three-Port DC-DC Converter for Photovoltaic (PV) Battery Stand-alone Systems
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2016 › Research › peer-review
Investigation of Transformer Winding Architectures for High Voltage (2.5 kV) Capacitor Charging and Discharging Applications
Research output: Contribution to journal › Journal article – Annual report year: 2016 › Research › peer-review

Loss Distribution Analysis of a Three-Port Converter for Low-Power Stand-Alone Light-to-Light Systems
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2016 › Research › peer-review

New Incremental Actuators based on Electro-active Polymer: Conceptual, Control, and Driver Design Considerations.
Research output: Contribution to journal › Journal article – Annual report year: 2016 › Research › peer-review

Power enhancement of piezoelectric transformers for power supplies.
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2016 › Research › peer-review

Relationship between voice coil fill factor and loudspeaker efficiency
Research output: Contribution to journal › Journal article – Annual report year: 2016 › Research › peer-review

Teaching Power Electronics with a Design-Oriented and Project-Based Learning Method at the Technical University of Denmark
Research output: Contribution to journal › Journal article – Annual report year: 2015 › Research › peer-review

The Benefits of SiC MOSFETs In a T-Type Inverter for Grid-Tie Applications
Research output: Contribution to journal › Journal article – Annual report year: 2016 › Research › peer-review

Ultrasonic lubrication: concept and application
Research output: Non-textual form › Sound/Visual production (digital) – Annual report year: 2016 › Research › peer-review

US Mains Stacked Very High Frequency Self-oscillating Resonant Power Converter with Unified Rectifier
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2016 › Research › peer-review

Wide Input Range Power Converters Using a Variable Turns Ratio Transformer
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2016 › Research › peer-review

Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2016 › Research › peer-review

A Comparison between Boundary and Continuous Conduction Modes in Single Phase PFC Using 600V Range Devices
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2015 › Research › peer-review

Analytical Switching Cycle Modeling of Bidirectional High Voltage Flyback Converter for Capacitive Load Considering Core Loss Effect
Research output: Contribution to journal › Journal article – Annual report year: 2015 › Research › peer-review

Bidirectional Flyback Converter with Multiple Series Connected Outputs for High Voltage Capacitive Charge and Discharge Applications
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2015 › Research › peer-review
Characterization and Evaluation of 600 V Range Devices for Active Power Factor Correction in Boundary and Continuous Conduction Modes
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2015 › Research › peer-review

Comparison of a state of the art Si IGBT and next generation fast switching devices in a 4 kW boost converter
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2015 › Research › peer-review

Control and sensor techniques for PAD servo motor drive
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2015 › Research › peer-review

Design and Evaluation of Accelerometer based Motional Feedback
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2015 › Research › peer-review

Design of a 300-Watt Isolated Power Supply for Ultra-Fast Tracking Converters
Research output: Contribution to journal › Journal article – Annual report year: 2014 › Research › peer-review

Efficiency Evaluation on a CoolMos Switching and IGBT Conducting Multilevel Inverter
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2015 › Research › peer-review

Efficiency Investigation of Switch Mode Power Amplifier Driving Low Impedance Transducers
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2015 › Research › peer-review

Efficiency Optimization by Considering the High Voltage Flyback Transformer Parasitics using an Automatic Winding Layout Technique
Research output: Contribution to journal › Journal article – Annual report year: 2014 › Research › peer-review

Efficiency Optimization in Class-D Audio Amplifiers
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2015 › Research › peer-review

Electronics drivers for high voltage dielectric electro active polymer (DEAP) applications
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2015 › Research › peer-review

Input-output rearrangement of isolated converters
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2015 › Research › peer-review

Investigation of Current Driven Loudspeakers
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2015 › Research › peer-review

Investigation of Energy Consumption and Sound Quality for Class-D Audio Amplifiers using Tracking Power Supplies
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2015 › Research › peer-review
Low Impedance Voice Coils for Improved Loudspeaker Efficiency
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2015 › Research › peer-review

MOSFET Loss Evaluation for a Low-Power Stand-Alone Photovoltaic-LED System
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2015 › Research › peer-review

Outphasing control of gallium nitride based very high frequency resonant converters
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2015 › Research › peer-review

Power Flow Control of a Dual-Input Interleaved Buck/Boost Converter with Galvanic Isolation for Renewable Energy Systems
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2015 › Research › peer-review

Preisach model of hysteresis for the Piezoelectric Actuator Drive
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2015 › Research › peer-review

Self-oscillating Galvanic Isolated Bidirectional Very High Frequency DC-DC Converter
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2015 › Research › peer-review

Using squeeze-film effect to reduce surface friction in electrostatic actuators
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2015 › Research › peer-review

Validation of Power Requirement Model for Active Loudspeakers
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2015 › Research › peer-review

A Direct Driver for Electrostatic Transducers
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2014 › Research › peer-review

A High Power Boost Converter for PV Systems Operating up to 300 kHz using SiC Devices.
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2014 › Research › peer-review

A High-Voltage Class D Audio Amplifier for Dielectric Elastomer Transducers
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2014 › Research › peer-review

Analysis and Comparison Based on Component Stress Factor of Dual Active Bridge and Isolated Full Bridge Boost Converters for Bidirectional Fuel Cells Systems
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2014 › Research › peer-review

Analysis and Comparison of Magnetic Structures in a Tapped Boost Converter for LED Applications
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2014 › Research › peer-review
Analysis and Comparison of Si and SiC Power Devices on a Grid-Tie Fuel Cell Energy Storage System
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2014 › Research › peer-review

A Review on the Implementation of Nonlinear Source Emulators
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2014 › Research › peer-review

A Three-Port Topology Comparison for a Low Power Stand-Alone Photovoltaic System
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2014 › Research › peer-review

A VHF Interleaved Self-Oscillating Resonant SEPIC Converter with Phase-Shift Burst-Mode Control
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2014 › Research › peer-review

Bi-directional high-side current sense circuit for switch mode power supplies
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2014 › Research › peer-review

Characterization of Dielectric Electroactive Polymer transducers
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2014 › Research › peer-review

Class D audio amplifier with 4th order output filter and self-oscillating full-state hysterisis based feedback driving capacitive transducers
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2014 › Research › peer-review

Comparative Study of Si and SiC MOSFETs for High Voltage Class D Audio Amplifiers
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2014 › Research › peer-review

Comprehensive Loss Evaluation of Neutral-Point-Clamped (NPC) and T-Type Three-Level Inverters based on a Circuit Level Decoupling Modulation.
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2014 › Research › peer-review

Constant Switching Frequency Self-Oscillating Controlled Class-D Amplifiers
Research output: Contribution to journal › Journal article – Annual report year: 2014 › Research › peer-review

DEAP actuator and its high voltage driver for heating valve application
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2014 › Research › peer-review

Design and Development of Autonomous High Voltage Driving System for DEAP Actuator in Radiator Thermostat
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2014 › Research › peer-review

Design and Implementation of Power Flow Control for a novel Dual Input DC-DC Converter
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2014 › Research › peer-review

Design Comparison of Autonomous High Voltage Driving System for DEAP Actuator
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2014 › Research › peer-review
Low Capacitive Inductors for Fast Switching Devices in Active Power Factor Correction Applications
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2014 › Research › peer-review

Low Power Very High Frequency Switch-Mode Power Supply with 50 V Input and 5 V Output
Research output: Contribution to journal › Journal article – Annual report year: 2014 › Research › peer-review

Minimization of the transformer inter-winding parasitic capacitance for modular stacking power supply applications
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2015 › Research › peer-review

Multilevel inverter based class D audio amplifier for capacitive transducers
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2014 › Research › peer-review

Optimization of Bi-Directional Flyback Converter for a High Voltage Capacitor Charging Application
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2014 › Research › peer-review

Overview of Planar Magnetic Technology — Fundamental Properties
Research output: Contribution to journal › Journal article – Annual report year: 2014 › Research › peer-review

Parallel input parallel output high voltage bi-directional converters for driving dielectric electro active polymer actuators
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2014 › Research › peer-review

Piezoelectric power converter with bi-directional power transfer

Piezoelectric stack actuator parameter extraction with hysteresis compensation
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2014 › Research › peer-review

Power Cycling and Thermal Stresses Analysis for High Efficiency DC/DC Converter (IFBBC) in Repetitive Avalanche Conditions
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2014 › Research › peer-review

Practical investigation of the gate bias effect on the reverse recovery behavior of the body diode in power MOSFETs
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2014 › Research › peer-review

Predistortion of a Bidirectional Cuk Audio Amplifier.
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2014 › Research › peer-review

Primary Parallel Secondary Series Flyback Converter (PPSSFC) with Multiple Transformers for Very High Step-Up Ratio in Capacitive Load Charging Applications
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2014 › Research › peer-review

Requirements Specication for Ampliers and Power Supplies in Active Loudspeakers
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2014 › Research › peer-review
Self-Oscillating Resonant Gate Drive for Resonant Inverters and Rectifiers Composed Solely of Passive Components
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2014 › Research › peer-review

State-of-the-art piezoelectric transformer-based switch mode power supplies
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2014 › Research › peer-review

Switching Investigations on a SiC MOSFET in a TO-247 Package
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2014 › Research › peer-review

Thermal Modeling and Design of On-board DC-DC Power Converter using Finite Element Method
Research output: Contribution to journal › Journal article – Annual report year: 2014 › Research › peer-review

Thermal Modelling and Design of On-board DC-DC Power Converter using Finite Element Method
Research output: Contribution to journal › Journal article – Annual report year: 2015 › Research › peer-review

Three-port DC-DC converter with new integrated transformer for DC Distribution Systems
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2014 › Research › peer-review

Ultrafast Switching Superjunction MOSFETs for Single Phase PFC Applications
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2014 › Research › peer-review

Very High Frequency Half Bridge DC/DC Converter
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2014 › Research › peer-review

Wide Operating Voltage Range Fuel Cell Battery Charger
Research output: Contribution to journal › Journal article – Annual report year: 2014 › Research › peer-review

Analysis and Design of Fully Integrated Planar Magnetics for Primary-Parallel Isolated Boost Converter
Research output: Contribution to journal › Journal article – Annual report year: 2012 › Research › peer-review

Analysis of DC/DC Converter Efficiency for Energy Storage System Based on Bidirectional Fuel Cells
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2013 › Research › peer-review

An integrated magnetics component
Research output: Patent › Patent – Annual report year: 2013 › Research

An interface board for developing control loops in power electronics based on microcontrollers and DSPs Cores -Arduino /ChipKit /dsPIC /DSP /TI Piccolo
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2013 › Research › peer-review

Boost converter with combined control loop for a stand-alone photovoltaic battery charge system
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2013 › Research › peer-review
Design Optimization of Printed Circuit Board Embedded Inductors through Genetic Algorithms with Verification by COMSOL
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2013 › Research › peer-review

Detailed Behavior Analysis for High Voltage Bidirectional Flyback Converter Driving DEAP Actuator
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2013 › Research › peer-review

Dielectric Electro Active Polymer Incremental Actuator Driven by Multiple High-Voltage Bi-directional DC-DC Converters
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2013 › Research › peer-review

Discontinuous PWM Modulation Strategy with Circuit-Level Decoupling Concept of Three-Level Neutral-Point Clamped (NPC) Inverter
Research output: Contribution to journal › Journal article – Annual report year: 2012 › Research › peer-review

Driving electrostatic transducers
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

Estimation of Transformer Parameters and Loss Analysis for High Voltage Capacitor Charging Application
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2013 › Research › peer-review

Evolution of Very High Frequency Power Supplies
Research output: Contribution to journal › Journal article – Annual report year: 2014 › Research › peer-review

Forward Conduction Mode Controlled Piezoelectric Transformer-Based PFC LED Drive
Research output: Contribution to journal › Journal article – Annual report year: 2013 › Research › peer-review

Fuel Cell and Battery Powered Forklifts
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2013 › Research › peer-review

High Voltage Bidirectional Flyback Converter Driving DEAP Actuator for Automotive Applications
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2013 › Research › peer-review

High Voltage Bi-directional Flyback Converter for Capacitive Actuator
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2013 › Research › peer-review

Hybrid winding concept for toroids
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2013 › Research › peer-review
Soft-Switched Dual-Input DC-DC Converter Combining a Boost-Half-Bridge Cell and a Voltage-Fed Full-Bridge Cell

Research output: Contribution to journal › Journal article – Annual report year: 2013 › Research › peer-review

Switching Performance Evaluation of Commercial SiC Power Devices (SiC JFET and SiC MOSFET) in Relation to the Gate Driver Complexity

Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2013 › Research › peer-review

Very High Frequency Interleaved Self-Oscillating Resonant SEPIC Converter

Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2014 › Research › peer-review

Very High Frequency Resonant DC/DC Converters for LED Lighting

Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2013 › Research › peer-review

VHF Series-Input Parallel-Output Interleaved Self-Oscillating Resonant SEPIC Converter

Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2013 › Research › peer-review

A capacitive level shifter for high voltage (2.5kV)

Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2012 › Research › peer-review

Active Match Load Circuit Intended for Testing Piezoelectric Transformers

Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2012 › Research › peer-review

A Fast-Processing Modulation Strategy for Three-Phase Four-Leg Neutral-Point-Clamped Inverter Based on the Circuit-Level Decoupling Concept

Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2012 › Research › peer-review

A Fault-Tolerant Modulation Method to Counteract the Double Open-Switch Fault in Matrix Converter Drive Systems without Redundant Power Devices

Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2012 › Research › peer-review

A high voltage DC-DC converter driving a Dielectric Electro Active Polymer actuator for wind turbine flaps

Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2012 › Research › peer-review

Analysis and Design of a Bidirectional Isolated DC-DC Converter for Fuel Cell and Super-Capacitor Hybrid System

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

Analysis of Dielectric Electro Active Polymer Actuator and its High Voltage Driving Circuits

Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2012 › Research › peer-review

Analysis of Planar E+I and ER+I Transformers for Low-Voltage High-Current DC/DC Converters with Focus on Winding Losses and Leakage Inductance

Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2012 › Research › peer-review
A New Method for Start-up of Isolated Boost Converters Using Magnetic- and Winding-Integration
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2012 › Research › peer-review

A review and design of power electronics converters for fuel cell hybrid system applications
Research output: Contribution to journal › Conference article – Annual report year: 2011 › Research › peer-review

A Review of High Voltage Drive Amplifiers for Capacitive Actuators
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2012 › Research › peer-review

Battery powered high output voltage bidirectional flyback converter for cylindrical DEAP actuator
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2012 › Research › peer-review

Current-Driven Switch-Mode Audio Power Amplifiers
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2012 › Research › peer-review

Decoupled Power Solution for Dual-input Isolated DC-DC Converters Using Four Quadrants Integrated Transformers (FQIT)
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2012 › Research › peer-review

Design Considerations of Very Low Profile Coupled Inductors for Flexible Photovoltaic Module
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2012 › Research › peer-review

Design of Interleaved Interdigitated Electrode Multilayer Piezoelectric Transformer utilizing Longitudinal and Thickness Mode Vibrations
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2012 › Research › peer-review

Design of interleaved multilayer rosen type piezoelectric transformer for high voltage dc/dc applications
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2012 › Research › peer-review

Dual-Input Isolated Full-Bridge Boost DC-DC Converter Based on the Distributed Transformers
Research output: Contribution to journal › Journal article – Annual report year: 2011 › Research › peer-review

Efficiency of Capacitively Loaded Converters
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2012 › Research › peer-review

Empiric analysis of zero voltage switching in piezoelectric transformer based resonant converters
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2012 › Research › peer-review

Four Quadrants Integrated Transformers for Dual-input Isolated DC-DC Converters
Research output: Contribution to journal › Journal article – Annual report year: 2012 › Research › peer-review

Integrated high voltage power supply utilizing burst mode control and its performance impact on dielectric electro active polymer actuators
Interleaved Self-Oscillating Class E Derived Resonant DC/DC Converters
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2012 › Research › peer-review

Method and device for current driven electric energy conversion
Research output: Patent › Patent – Annual report year: 2012 › Research

Modeling and Control of a Dual-Input Isolated Full-Bridge Boost Converter
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2012 › Research › peer-review

Modeling and Control of Primary Parallel Isolated Boost Converter
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2012 › Research › peer-review

Nonlinear Effects in Piezoelectric Transformers Explained by Thermal-Electric Model Based on a Hypothesis of Self-Heating
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2012 › Research › peer-review

Optimal Design and Tradeoff Analysis of Planar Transformer in High-Power DC–DC Converters
Research output: Contribution to journal › Journal article – Annual report year: 2010 › Research › peer-review

Optimal Design of a Push-Pull-Forward Half-Bridge (PPFHB) Bidirectional DC–DC Converter With Variable Input Voltage
Research output: Contribution to journal › Journal article – Annual report year: 2012 › Research › peer-review

Primary Paralleled Isolated Boost Converter with Extended Operating Voltage Range
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2012 › Research › peer-review

Primary Parallel Isolated Boost Converter with Bidirectional Operation
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2012 › Research › peer-review

Printed Circuit Board Integrated Toroidal Radio Frequency Inductors
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2012 › Research › peer-review

Research on EMI Reduction of Interleaved Bridgeless Power Factor Corrector using Frequency Dithering
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2012 › Research › peer-review

Research on EMI Reduction of Multi-stage Interleaved Bridgeless Power Factor Corrector
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2012 › Research › peer-review

Research on High Efficient Single-Phase Multi-Stage Interleaved Bridgeless PFC Frontend for Class-D Amplifiers
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2012 › Research › peer-review

Separation of common and differential mode conducted emission: Power combiner/splitters
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2012 › Research › peer-review
Simulation of Piezoelectric Transformers with COMSOL
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2012 › Research › peer-review

Analysis of Current-Bidirectional Buck-Boost Based Automotive Switch-Mode Audio Amplifier
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2011 › Research › peer-review

A Novel Bridgeless Power Factor Correction with Interleaved Boost Stages in Continuous Current Mode
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2011 › Research › peer-review

A Self-Oscillating Control Scheme for a Boost Converter Providing a Controlled Output Current
Research output: Contribution to journal › Journal article – Annual report year: 2011 › Research › peer-review

A VHF Class E DC-DC Converter with Self-Oscillating Gate Driver
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2011 › Research › peer-review

Comparison of Current Balancing Configurations for Primary Parallel Isolated Boost Converter
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2011 › Research › peer-review

Fully integrated planar magnetics for primary-parallel isolated boost converter
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2011 › Research › peer-review

Integrated Current Balancing Transformer for Primary Parallel Isolated Boost Converter
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2011 › Research › peer-review

Isolated Bidirectional DC–DC Converter for SuperCapacitor Applications
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2011 › Research › peer-review

Low profile, low cost, new geometry integrated inductors
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2011 › Research › peer-review

Low voltage driven dielectric electro active polymer actuator with integrated piezoelectric transformer based driver
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2011 › Research › peer-review

One-shot Design of Radial Mode Piezoelectric Transformer for Magneticless Power Conversion
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2011 › Research › peer-review

Planar Integrated Magnetics (PIM) Module in Hybrid Bidirectional DC-DC Converter for Fuel Cell Application
Research output: Contribution to journal › Journal article – Annual report year: 2011 › Research › peer-review
Preliminary investigations of piezoelectric based LED luminary
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2011 › Research › peer-review

Research on Power Factor Correction Boost Inductor Design Optimization – Efficiency vs. Power Density
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2011 › Research › peer-review

The Circuit-Level Decoupling Modulation Strategy for Three-Level Neutral-Point-Clamped (TL-NPC) Inverter
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2011 › Research › peer-review

Improvement of out-of-band Behaviour in Switch-Mode Amplifiers and Power Supplies by their Modulation Topology

A high efficient integrated planar transformer for primary-parallel isolated boost converters
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2010 › Research

A Novel Dual-input Isolated Current-Fed DC-DC Converter for Renewable Energy System
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2011 › Research › peer-review

A review of module inverter topologies suitable for photovoltaic system
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2010 › Research › peer-review

Energy harvesting from an exercise bike using a switch-mode converter controlled generator
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2010 › Research › peer-review

Full Space Vectors Modulation for Nine-Switch Converters Including CF & DF Modes
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2010 › Research › peer-review

High-Efficiency Isolated Boost DCDC Converter for High-Power Low-Voltage Fuel-Cell Applications
Research output: Contribution to journal › Journal article – Annual report year: 2010 › Research › peer-review

Modeling Distortion Effects in Class-D Amplifier Filter Inductors
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2010 › Research › peer-review

New Geometry Integrated Inductors in Two-channel Interleaved Bidirectional Converter
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2010 › Research › peer-review

Optimal Design and Tradeoffs Analysis for Planar Transformer in High Power DC-DC Converters
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2010 › Research › peer-review

Planar integrated magnetics design in wide input range DC-DC converter for fuel cell application
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2010 › Research › peer-review
Active Electromagnetic Interference Cancelation for Automotive Switch-Mode Audio Power Amplifiers
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2009 › Research › peer-review

A DC-DC Converter with Wide Input Voltage Range for Fuel Cell and Supercapacitor Application
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2009 › Research › peer-review

Analysis and Design of Bi-Directional DC-DC Converter in the Extended Run Time DC UPS System Based on Fuel Cell and Supercapacitor
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2009 › Research › peer-review

Analysis and design of PPFHB bidirectional DC-DC converter with coupled inductors
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2009 › Research › peer-review

A New Very-High-Efficiency R4 Converter for High-Power Fuel Cell Applications
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2009 › Research › peer-review

A Novel PPFHB Bidirectional DC-DC Converter for Supercapacitor Application
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2009 › Research › peer-review

A Two-stage DC-DC Converter for the Fuel Cell-Supercapacitor Hybrid System
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2009 › Research › peer-review

Carrier Distortion in Hysteretic Self-Oscillating Class-D Audio Power Amplifiers: Analysis and Optimization
Research output: Contribution to journal › Journal article – Annual report year: 2009 › Research › peer-review

Conduction Losses and Common Mode EMI Analysis on Bridgeless Power Factor Correction
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2009 › Research › peer-review

DOUBLE-BOOST DC-AC CONVERTER WITH SLIDING-MODE CONTROL FOR PORTABLE AUDIO
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2009 › Research › peer-review

Evaluation of single phase transformerless inverter topology for photovoltaic systems
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2009 › Research › peer-review

Investigation of switching frequency variations and EMI properties in self-oscillating class D amplifiers
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2009 › Research › peer-review

Investigation of switching frequency variations in self-oscillating class D amplifiers
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2009 › Research › peer-review
Optimized Envelope Tracking Power Supply for Tetra2 Base Station RF Power Amplifier
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2008 › Research › peer-review

Parameterized Analysis of Zero Voltage Switching in Resonant Converters for Optimal Electrode Layout of Piezoelectric Transformers
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2008 › Research › peer-review

Ultra-Fast Tracking Power Supply with 4th order Output Filter and Fixed-Frequency Hysteretic Control
Research output: Contribution to journal › Journal article – Annual report year: 2008 › Research › peer-review

A 0.35μm 50V CMOS Sliding-Mode Control IC for Buck Converters
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2007 › Research › peer-review

Accurate Sliding-Mode Control System Modeling for Buck Converters
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2007 › Research › peer-review

A Comparative Study of Analog Voltage-mode Control Methods for Ultra-Fast Tracking Power Supplies
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2007 › Research › peer-review

Digitally Controlled Envelope Tracking Power Supply for an RF Power Amplifier
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2007 › Research › peer-review

Digitally Controlled Offline Converter with Galvanic Isolation Based on an 8-bit Microcontroller
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2007 › Research › peer-review

Digitally Controlled Point of Load Converter with Very Fast Transient Response
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2007 › Research › peer-review

DIGITAL SELF-OscILLATING MODULATOR

Isolated EWIRaC: A New Low-Stress Single-Stage Isolated PFC Converter
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2007 › Research › peer-review

Self-Oscillating Soft Switching Envelope Tracking Power Supply for Tetra2 Base Station
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2007 › Research › peer-review

Two-Phase Interleaved Buck Converter with a new Digital Self-Oscillating Modulator
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2007 › Research › peer-review

A 500-W Transformer-Less Efficient Universal Wide-Range Power Factor Preregulator
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2006 › Research › peer-review
A small-signal model of the hysteretic comparator in linear-carrier self-oscillating switch-mode controllers
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2006 › Research › peer-review

Comparison of two different high performance mixed signal controllers for DC/DC converters
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2006 › Research › peer-review

Efficient Wide Range Converters (EWiRaC): A new family of high efficient AC-DC Converters
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2006 › Research › peer-review

Envelope Tracking Power Supply with fully controlled 4th order Output Filter
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2006 › Research › peer-review

High performance mixed signal controllers for DC/DC converters
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2006 › Research › peer-review

TBD
Research output: Patent › Patent – Annual report year: 2006 › Research

Derivation and Analysis of a Low-Cost, High-performance Analogue BPCM Control Scheme for Class-D Audio Power Amplifiers
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2005 › Research › peer-review

Direct-conversion switching-mode audio power amplifier with active capacitive voltage clamp
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2005 › Research › peer-review

Efficient Audio Power Amplification - Challenges
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2005 › Research › peer-review

Experimental Verification of the Thermal Droop Load Sharing Technique
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2005 › Research › peer-review

Four-quadrant flyback converter for direct audio power amplification
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2005 › Research › peer-review

High-Bandwidth, High-Efficiency Envelope Tracking Power Supply for 40W RF Power Amplifier Using Paralleled Bandpass Current Sources
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2005 › Research › peer-review

Hybrid Control Method for a Single Phase PFC using a Low Cost Microcontroller
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2005 › Research › peer-review
Hysteresis controller with constant switching frequency
Research output: Contribution to journal › Journal article – Annual report year: 2005 › Research › peer-review

Integrated magnetics design for HF-link power converters
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2005 › Research › peer-review

New active load voltage clamp for HF-link converters
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2005 › Research › peer-review

New PWM method and commutation strategy for HF-link converters for fuel cells and photovoltaics
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2005 › Research › peer-review

Self-oscillating modulators for direct energy conversion audio power amplifiers
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2005 › Research › peer-review

Simple single-phase HF-link UPS with new PWM approach
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2005 › Research › peer-review

Switching-mode Audio Power Amplifiers with Direct Energy Conversion
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2005 › Research › peer-review

Approaches to building single-stage AC/AC conversion switch-mode audio power amplifiers
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2004 › Research › peer-review

Digitally-controlled PC-interfaced Boost Converter for Educational Purposes
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2004 › Research › peer-review

Efficiency improvement in redundant power systems by means of thermal load sharing
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2004 › Research › peer-review

High Bandwidth Automotive Power Supply for Low-cost PWM Audio Amplifiers
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2004 › Research › peer-review

Hysteresis Controller with constant switching frequency
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2004 › Research › peer-review

Integrating switch mode audio amplifiers and electro dynamic loudspeakers for a higher power efficiency
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2004 › Research › peer-review

Integrating switch mode audio power amplifiers and electro dynamic loudspeakers for a higher power efficiency
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2004 › Research › peer-review
Effektoptimering af afbøjningsforstærkeren i den vertikale afbøjning i TV
Research output: Book/Report › Report – Annual report year: 1999 › Research › peer-review

Magnetik
Research output: Book/Report › Book – Annual report year: 1999 › Research › peer-review

Practical Implementation and Error Analysis of PSCPWM-Based Switching Audio Power Amplifiers
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 1999 › Research › peer-review

Skjult elforbrug
Research output: Book/Report › Report – Annual report year: 1999 › Research › peer-review

Boost-omformeren til PFC
Research output: Book/Report › Book – Annual report year: 1998 › Research › peer-review

Comparing Non-linear with Linear Control Methods for Error Correction in Switching Audio Amplifier Output Stages
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 1998 › Research › peer-review

Control Circuit Analysis Applied to Power Electronics
Research output: Book/Report › Book – Annual report year: 1998 › Research › peer-review

Ensrettere med ohmsk belastning af nettet.
Research output: Book/Report › Book – Annual report year: 1998 › Research › peer-review

Flyback-omformaren til PFC
Research output: Book/Report › Book – Annual report year: 1998 › Research › peer-review

Power Factor Correction, PFC.
Research output: Book/Report › Book – Annual report year: 1998 › Research › peer-review

Switch-mode audio effektførstærker: CoolPower
Research output: Book/Report › Book – Annual report year: 1998 › Research › peer-review

Trefaset skiftkontakt med IGBT'er
Research output: Book/Report › Book – Annual report year: 1998 › Research › peer-review

Fast Prediction of Differential Mode Noise Input Filter Requirements for Flyback and Boost Unity Power Factor Converters
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 1997 › Research › peer-review

Fast Prediction of Differential Mode Noise Input Filter Requirements for Flyback and Boost Unity Power Factor Converters
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 1997 › Research › peer-review

Single Phase Low Distortion DC/AC-Inverter with high bandwidth to switching frequency ratio
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 1997 › Research › peer-review
High Fidelity Pulse Width Modulation Amplifiers based on Novel Double Loop Feedback Techniques
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 1996 › Research › peer-review

MOS Gate Driver Circuit with Extremely High Galvanic Isolation
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 1995 › Research › peer-review

PC-programs for Designing Snubber Circuits
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 1995 › Research › peer-review

Possible Technical Solutions to Reduce Energy Consumption in Audio Products
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 1995 › Research › peer-review

A New Application for Zero-Current-Switched Full-Wave Resonant Converters
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 1993 › Research › peer-review

Comparison of three IGBT-Inverters, one Hard-Switched and two with Snubber Circuits using a Minimum Number of Components
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 1993 › Research › peer-review

PC-Program with Graphic Presentation for Fast Interactive Design Decisions for Snubber Circuits
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 1993 › Research › peer-review

New Principle for Digital Audio Power Amplifiers
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 1992 › Research › peer-review

Novel Simple Lossless Snubber Circuit for an IGBT-Inverter
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 1992 › Research › peer-review

Special purpose PC-computer program as a design tool for optimizing snubber circuits for an IGBT-Inverter
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 1992 › Research › peer-review

Computer Program for Designing Snubber Circuit for an IGBT-Inverter
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 1991 › Research › peer-review

Computer Program with Supplementary Design Graphs for Designing Snubber Circuit for an IGBT-Inverter
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 1991 › Research › peer-review

A Comparison of three Inverters with IGBTs, GTOs and Bipolar Transistors at 600V and 300A
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 1990 › Research › peer-review

Effektelektroniske kontaktelementer
GTO-Inverter with Computer Designed Optimal Values of the Snubber Components

Projects:

High Efficiency High Density Power Converters for Wireless Rapid Charging System
Project: PhD

Application Specific Integrated Circuit for New Generation of MEMS Acoustic Sensor
Project: PhD

High Efficiency and High Power Density AC-DC Power Converters
Project: PhD

Advanced Power Converters for Wireless Rapid Charging System
Project: PhD

Optimized Seamless Transfer System for DG Inverter
Project: PhD

Next generation Power Supplies and their applications in mobility and electrolysis
Project: PhD

Modulær opbygning af effektelektroniske konvertere med galvanisk isolering i effektområdet 1-10kW
Project: PhD

Standby spændingsforsyninger
Project: PhD

Højeffektive effektforstærkere
Project: PhD

Integrated off-line power converter using integrated inductors
Project: PhD

High Frequency Switch-Mode Audio Power Amplifiers
Project: PhD

Engineering passive electronic components for the world’s smallest AC-DC power supply by nanofabrication
Project: PhD

DC-DC converters for use of Li-Ion batteries in hearing aids
Project: PhD

Electrical structure of future offshore wind turbine farms with a DC transmission connection
Project: PhD

Integrated Circuit Design of Switching Power Stages for Audio Power Amplification Project: PhD
High performance low cost digital controlled power conversion technology
Project: PhD

ACT- Active Transducer
Project: PhD

Energibesparende ensretter (etrins konverter)
Project: PhD

SICAM - Single Conversion Stage AMplifier
Project: PhD

Powering the future data centre
Project: PhD

Ultra-fast Tracking Power Converters for RF power Amplifiers
Project: PhD

New Technology-Driven Approaches in the Design of Preamplifiers for Condenser Microphones
Project: PhD

Improvement of out-of-band Behaviour in Switch Mode Amplifiers and Power Supplies by their Modulation Topology
Project: PhD

Fejltolerante powersystemer
Project: PhD

Switch-Mode Power Amplifiers for Current Controlled Loudspeakers
Project: PhD

Galvanic isolated off-line VHF switch-mode power supplies
Project: PhD

High Performance Solar Array Simulator
Project: PhD

Control and sensor techniques for PAD servo motor drives
Project: PhD

High efficiency reversible fuel cell power converter
Project: PhD

High Power DEAP actuator drive for wind turbine flaps
Project: PhD

Multi-portBidirectional Current Controlled Power Supply
Project: PhD

On the Integration of Wide Band-gap Semiconductors in Single Phase Boost PFC Converters
Project: PhD
PV Inverter and control  
Project: PhD

Non-magnetic driver for piezo actuators  
Project: PhD

Very High Frequency Switch-Mode Power Supplies  
Project: PhD

Radio frequency switch-mode power supplies  
Project: PhD

Low power DEAP actuator drive for heating valves  
Project: PhD

Piezoelectric transformer based LED lighting  
Project: PhD

High efficiency PFC frontend for class-D amplifiers  
Project: PhD

Design of digital audio Class-D output stage with feedback - emphasis on hearing aid application  
Project: PhD

Controller IC-design for piezoelectric transformer based power supply  
Project: PhD

Piezoelectric transformer based power supply for DEAP  
Project: PhD

Planar Magnetics for High Grade Converters  
Project: PhD

Flexible power module for fuel cell hybrid power system in a fork-lift  
Project: PhD

Vertical Deflection in TV  
Project: Research

Pulse Edge Delay Error Correction  
Project: Research

Verification of power and energy measuring instruments  
Project: Research

Standby Power Supply  
Project: Research

Power Factor Converters  
Project: Research
High Efficiency Audio Power Amplifiers
Project: Research

Activities:

Aalborg University (External organisation)
Activity: Membership › Membership in review committee

University of Southern Denmark (External organisation)
Activity: Membership › Membership in review committee

External examiner on PhD defense by PhD student Karsten Holm Andersen
Activity: Examinations and supervision › External examination

Evaluation of PhD thesis by Juan Rodríguez Méndez
Activity: Examinations and supervision › External examination

Chilean National Commision for Scientific and Technological Research (CONICYT) (External organisation)
Activity: Membership › Membership in review committee

EUREKA expert (External organisation)
Activity: Membership › Membership in review committee

Aalborg University (External organisation)
Activity: Membership › Membership in review committee

Aalborg University (External organisation)
Activity: Membership › Membership in review committee

External examiner on PhD defense by PhD student Farideh Javidi Niroumand
Activity: Examinations and supervision › External examination

EUREKA expert (External organisation)
Activity: Membership › Membership in review committee

Miniature converters
Activity: Talks and presentations › Conference presentations

Dartmouth College (External organisation)
Activity: Membership › Membership in review committee

External examiner on PhD defense by PhD student Mark Caris
Activity: Examinations and supervision › External examination

Head of committee at PhD defense by PhD student Juan Colmenares
Activity: Examinations and supervision › External examination

External examiner on PhD thesis by PhD student Vita Lystianingrum
Activity: Examinations and supervision › External examination
**Committee member at PhD defense by PhD student Luyu Wang**
Activity: Examinations and supervision › External examination

**Fundamentals of Electrical Energy Conversion**
Activity: Talks and presentations › Guest lectures, external teaching and course activities at other universities

**Integrated and Very High Frequency Converter**
Activity: Talks and presentations › Talks and presentations in private or public companies and organisations

**External examiner on PhD thesis by PhD student Xian Liang**
Activity: Examinations and supervision › External examination

**External examiner on PhD thesis by PhD student Ishtiyaq Amhed Makda**
Activity: Examinations and supervision › External examination

**External examiner on PhD thesis by PhD student Yi Wang**
Activity: Examinations and supervision › External examination

**External examiner on PhD thesis by PhD student Ciaran Feeney**
Activity: Examinations and supervision › External examination

**External examiner on Doctoral Thesis by PhD student Toke Meyer Andersen**
Activity: Examinations and supervision › External examination

**Nordic Power Converters Aps (External organisation)**
Activity: Membership › Board duties in companies, associations, or public organisations

**Committee member at PhD defense by PhD student Jonas Ottosson**
Activity: Examinations and supervision › External examination

**Committee member at PhD defense by PhD student Abdul Majid**
Activity: Examinations and supervision › External examination

**Committee member of Doctoral Examination of PhD student Frank van der Pijl**
Activity: Examinations and supervision › External examination

**External examiner on PhD thesis by PhD student Sri Susovon Samanta**
Activity: Examinations and supervision › External examination

**Al-Balqa Applied University (External organisation)**
Activity: Membership › Membership in review committee

**IEEE Transactions on Power Electronics (Journal)**
Activity: Editorial work and peer review › Journal editor › Research

**External examiner on PhD thesis by PhD student Jelena Haas-Christensen**
Activity: Examinations and supervision › External examination

**Opponent på Doctoral Thesis af PhD-studerende Konstantiv Kostov**
Activity: Examinations and supervision › External examination
External examiner on PhD thesis by PhD student Flemming Nyboe
Activity: Examinations and supervision › External examination

Committee member at PhD defense by PhD student Bengt Johansson
Activity: Examinations and supervision › External examination

Texas Tech University (External organisation)
Activity: Membership › Study administrative duties

Opponent on Doctoral Thesis by PhD student Vesa Touomainen
Activity: Examinations and supervision › External examination

Center for Electrical Energy Systems (CEES) (External organisation)
Activity: Membership › Board duties in companies, associations, or public organisations

Danish Energy Agency (External organisation)
Activity: Membership › Membership in review committee

Prizes:

2013 IEEE ECCE Asia Downunder First Prize Paper
Prize: Prizes, scholarships, distinctions

AEG Elektronprisen
Prize: Prizes, scholarships, distinctions

A. R. Angelo's Grant
Prize: Prizes, scholarships, distinctions

Best Poster Prize UPEC '91
Prize: Prizes, scholarships, distinctions

DTU Innovation Prize
Prize: Prizes, scholarships, distinctions

First Prize UTRC Best Student Paper at ECCE 2013
Prize: Prizes, scholarships, distinctions

P. Gorm-Petersen's Memorial Grant
Prize: Prizes, scholarships, distinctions

The Danish Royal Knight of the Order of Dannebrog
Prize: Prizes, scholarships, distinctions

Press clippings:

Nye løsninger kan tage livet af den irriterende klods på ledningen
Press/Media: Press / Media