Pooya Davari
Lektor, Leder
AAU Energi
Det Ingeniør- og Naturvidenskabelige Fakultet
Applied Power Electronic Systems
Applied Power Electronic Systems
E-Mobility and Drives
EMI/EMC in Power Electronics
Reliability of Power Electronic Components
Adressetype: Besøgsadresse.
Pontoppidanstræde 111
1.165
9220
Aalborg Øst
Danmark
E-mail: pda@energy.aau.dk
Telefon: +4599408461

!!Employments

Lektor, Leder
Lektor, Leder
AAU Energi
Det Ingeniør- og Naturvidenskabelige Fakultet
Aalborg Øst, Danmark
1 aug. 2014 → 31 dec. 4712

Lektor, Leder
Lektor, Leder
Det Ingeniør- og Naturvidenskabelige Fakultet
Aalborg Øst, Danmark
1 aug. 2014 → 31 dec. 4712

Applied Power Electronic Systems
Det Ingeniør- og Naturvidenskabelige Fakultet
Aalborg Øst, Danmark
1 jan. 2021 → present

Lektor, Leder
Lektor, Leder
Applied Power Electronic Systems
Det Ingeniør- og Naturvidenskabelige Fakultet
Aalborg Øst, Danmark
1 aug. 2014 → 31 dec. 4712

E-Mobility and Drives
Det Ingeniør- og Naturvidenskabelige Fakultet
Aalborg Øst, Danmark
1 aug. 2014 → present

EMI/EMC in Power Electronics
Det Ingeniør- og Naturvidenskabelige Fakultet
Aalborg Øst, Danmark
1 jan. 2021 → present

Reliability of Power Electronic Components

Det Ingeniør- og Naturvidenskabelige Fakultet
Aalborg Øst, Danmark
1 jan. 2021 → present

Publikationer

A Holistic Optimization Framework for Optimal Sizing, Cost and Longer Lifetime of DC-DC Modular Solid-State Transformers in Wind Energy Applications
Ogan, S. E., Song, C., Chakraborty, S., Geury, T., Davari, P. & Hegazy, O., mar. 2025, I: IEEE Access.

Analytical Transient Model of Field-Stop IGBT Accounting for Temperature Dependence
Xue, P. & Davari, P., 24 feb. 2025, I: IEEE Transactions on Power Electronics . 40, 6, s. 8062-8074 13 s., 10900567.

Dual Mode BCM Control for Single-Phase Grid-Connected Inverter
Liu, C., Li, S., Davari, P. & Blaabjerg, F., 10 feb. 2025, *2024 IEEE Energy Conversion Congress and Exposition (ECCE).* IEEE, s. 4129-4136 8 s.

Accelerated SoH Balancing in Lithium-ion Battery Packs Using Finite Set MPC
Oshnoei, A., Sorouri, H., Safari, A., Davari, P., Zacho, M., Dahl Johnsen, A. & Teodorescu, R., 2025, *The 26th European Conference on Power Electronics and Applications.*

Multiphase LLC Resonant Converter with Natural Current Sharing and Phase-Shedding
Ahmad, U., Giral, R., Olalla, C., Sangwongwanich, A., Davari, P. & Blaabjerg, F., 2025, (Accepteret/In press) I: I E E E Transactions on Industry Applications.

Transformer Volume Reduction: A New Analysis and Design of an SSSA Control Based 20kW High Power Density Wide Range Resonant Converter
Shi, Z., Tang, Y., Zhang, Z., Ge, L. & Davari, P., 2025, (Accepteret/In press) I: I E E E Transactions on Industrial Electronics.

DM EMI Noise Prediction for BCM based Single-Phase Grid-Connected Inverter
Liu, C., Blaabjerg, F. & Davari, P., 6 nov. 2024, *2024 14th International Workshop on the Electromagnetic Compatibility of Integrated Circuits, EMC Compo 2024.* IEEE (Institute of Electrical and Electronics Engineers), 10742037. (International Workshop on the Electromagnetic Compatibility of Integrated Circuits (EMC Compo)).

Aggregated EMI Prediction in 2-150 kHz using Black Box Model of Power Converters
Beshir, A., Jensen, P. T., Kumar, D. & Davari, P., 28 okt. 2024, *2024 International Symposium on Electromagnetic Compatibility – EMC Europe.* IEEE (Institute of Electrical and Electronics Engineers), 10722680. (International Symposium on Electromagnetic Compatibility (EMC EUROPE)).

Current-Limiting Control Strategy for Indirect-Current-Controlled Active Power Filter
Gao, C., He, S., Fang, X., Davari, P., Leung, K. N., Loh, P. C. & Blaabjerg, F., 24 okt. 2024, I: I E E E Transactions on Power Delivery. 39, 6, s. 3551-3554 4 s.

A Temperature-Dependent Analytical Transient Model of SiC MOSFET in Half-Bridge Circuits
Xue, P. & Davari, P., 9 okt. 2024, I: I E E E Transactions on Power Electronics. 40, 1, s. 1-14 14 s.

Systematic Approach for EMI Equivalent Model Derivation of Three Phase DC-Fed Motor Drives
Babu, P., Tang, Z., Peyghami, S., Blaabjerg, F., Christensen, N. & Davari, P., 9 okt. 2024, *2024 International Conference on Electrical Machines (ICEM).* IEEE (Institute of Electrical and Electronics Engineers), 7 s. 10700164. (International Conference on Electrical Machines (ICEM)).

Passivity-Based Optimal State-Feedback Control for LCL-Filtered Grid-Following Converter
Gao, C., He, S., Song, P., Davari, P., Leung, K. N., Chiang Loh, P. & Blaabjerg, F., okt. 2024, I: I E E E Transactions on Power Electronics. 39, 10, s. 13009-13022 14 s.

An RC snubber design method to achieve optimized switching noise-loss trade-off of cascode GaN HEMTs
Xue, P., Hoene, E. & Davari, P., 16 sep. 2024, I: IET Power Electronics. 17, 12, s. 1583-1593 11 s.

Capacitor Current Compensation for BCM based Single-Phase Grid-Connected Inverter
Liu, C., Davari, P. & Blaabjerg, F., 2 jul. 2024, *2024 IEEE 10th International Power Electronics and Motion Control Conference (IPEMC2024-ECCE Asia).* IEEE (Institute of Electrical and Electronics Engineers), s. 1270-1275 6 s. (International Power Electronics and Motion Control Conference (PEMC)).

Programmable Multi-input Buck-Boost Converter for Photovoltaics Arrays
Tang, Z., Zhang, Y. & Davari, P., 2 jul. 2024, *2024 IEEE 10th International Power Electronics and Motion Control Conference (IPEMC2024-ECCE Asia).* IEEE (Institute of Electrical and Electronics Engineers), s. 2589-2593 5 s. (International Power Electronics and Motion Control Conference (PEMC)).

On-board charger applications: A new hybrid control strategy for bidirectional CLLC resonant converter
Shi, Z., Tang, Y. & Davari, P., jul. 2024, I: International Journal of Circuit Theory & Applications. 52, 7, s. 3154-3169 16 s.

A System-Level Design for Reliability of Integrated Motor Drives
Ahooye Atashin, S., Peyghami, S., Davari, P., Chopade, A. R., Hanigovszki, N. & Blaabjerg, F., 2024, *2024 International Conference on Electrical Machines (ICEM).* IEEE (Institute of Electrical and Electronics Engineers), 6 s. 10700144. (International Conference on Electrical Machines (ICEM)).

Behavioral Model of Inductors via Physics-Informed Circuit Synthesis and Modified Vector Fitting
Wan, L., Negri, S., Spadacini, G. & Davari, P., 2024, *2024 International Symposium on Electromagnetic Compatibility – EMC Europe.* 2024 udg. IEEE (Institute of Electrical and Electronics Engineers), s. 505-510 6 s. (International Symposium on Electromagnetic Compatibility (EMC EUROPE)).

Modeling the Unintentional Emissions of Single-Phase Power Electronic Converters for Distortion Studies in the 2-150 kHz Range
Collin, A., Meyer, J., Davari, P., Drapela, J., Chang, G. W. & Langella, R., 2024, I: I E E E Transactions on Power Delivery. 39, 6, s. 3126-3138 13 s.

Online Temperature Estimation for Lithium-Ion Batteries Utilizing a Single-Frequency Impedance Unaffected by Their Peripheral Circuits
Zhao, Z., Hu, H., He, Z., Ho-Ching Iu, H., Davari, P., Blaabjerg, F. & Wang, H., 2024, I: I E E E Transactions on Power Electronics. 39, 11, s. 15118-15135 18 s.

Optimized Design of Multi-Channel Resonant Converter for Fuel Cell Application
Zaikin, D., Andresen, M. K., Rugholt, M., Kjeldsen, T. & Davari, P., 2024, I: IEEE Access. 12, s. 66605-66624 20 s.

Transformer Volume Reduction: A New Analysis and Design of an SSSA Control-Based 20-kW High Power Density Wide Range Resonant Converter
Shi, Z., Tang, Y., Zhang, Z., Ge, L. & Davari, P., 2024, I: IEEE Transactions on Industrial Electronics. 71, 11, s. 13503-13512 10 s.

X-in-the-Loop Validation of Deep Learning-Based Virtual Sensing for Lifetime Estimation of Automotive Power Electronics Converters
Chakraborty, S., Kumar Bhoi, S., Hosseinabadi, F., Davari, P., Blaabjerg, F. & Hegazy, O., 2024, I: I E E E Journal of Emerging and Selected Topics in Power Electronics. 12, 6, s. 5777-5793 17 s.

Advanced Solid-State Lithium Battery and Its Safety
Zhao, Z., Hu, H., He, Z., Zhu, H., Davari, P. & Blaabjerg, F., 1 dec. 2023, I: CPSS Transactions on Power Electronics and Applications (CPSS TPEA). 8, 4, s. 348 - 362 15 s., 10122805.

Passivity-Based Design of Resonant Current Controllers Without Involving Partial Derivative
Gao, C., He, S., Davari, P., Leung, K. N., Loh, P. C. & Blaabjerg, F., 1 dec. 2023, I: I E E E Transactions on Power Electronics. 38, 12, s. 15102-15108 7 s., 10244049.

A Decentralized Control Scheme for Active Power Filter Parallel System
Gao, C., He, S., Davari, P., Blaabjerg, F., Leung, K. N. & Loh, P. C., 16 nov. 2023, *Proceedings of the IECON 2023- 49th Annual Conference of the IEEE Industrial Electronics Society.* IEEE Press, s. 1-5 5 s. 10311852. (Proceedings of the Annual Conference of the IEEE Industrial Electronics Society).

A Transient-Modeling-Based Grey-Box Method for Online Monitoring of DC-Link Capacitors
Zhao, Z., Hu, H., He, Z., Lu, W., Ho-Ching Iu, H., Blaabjerg, F. & Davari, P., 1 nov. 2023, I: I E E E Transactions on Power Electronics. 38, 11, s. 14547 - 14562 16 s., 10229504.

A critical review of the effect of light duty electric vehicle charging on the power grid
Tasnim, M. N., Akter, S., Shahjalal, M., Shams, T., Davari, P. & Iqbal, A., nov. 2023, I: Energy Reports. 10, s. 4126-4147 22 s.

Closed-loop impedance modeling and analysis of three-phase active rectifier below 150 kHz frequency range
Tang, Z., Johansen, F. & Davari, P., 8 sep. 2023, *2023 25th European Conference on Power Electronics and Applications, EPE 2023 ECCE Europe.* IEEE (Institute of Electrical and Electronics Engineers), s. 1-9 9 s. 10264600

The Trade-off of Switching Losses and EMI Generation for SiC MOSFET with Common Source and Kelvin Source Configurations
Xue, P. & Davari, P., 8 sep. 2023, *2023 25th European Conference on Power Electronics and Applications, EPE 2023 ECCE Europe.* IEEE (Institute of Electrical and Electronics Engineers), s. 1-8 8 s. 10264332

Simultaneous Multi-Spot Temperature Prediction of Traction Transformer in Urban Rail Transit Using Long Short-Term Memory Networks
Li, C., Chen, J., Xue, C., Liu, Z. & Davari, P., 1 sep. 2023, I: IEEE Transactions on Transportation Electrification. 9, 3, s. 4552-4561 10 s.

Hybrid Modulation for Balancing Thermal Dissipation in Dual Active Bridge Converters
Liu, B., Davari, P. & Blaabjerg, F., sep. 2023, *2023 25th European Conference on Power Electronics and Applications (EPE'23 ECCE Europe).* IEEE (Institute of Electrical and Electronics Engineers), s. 1-5 5 s. 10264301

Power Electronics-Based Safety Enhancement Technologies for Lithium-Ion Batteries: An Overview From Battery Management Perspective
Zhao, Z., Hu, H., He, Z., Ho-Ching Iu, H., Davari, P. & Blaabjerg, F., jul. 2023, I: I E E E Transactions on Power Electronics. 38, 7, s. 8922-8955 34 s., 10093995.

A Temperature-Dependent dVCE/dt and dIC/dt Model for Field-Stop IGBT at Turn-on Transient
Xue, P. & Davari, P., 1 jun. 2023, I: IEEE Transactions on Power Electronics . 38, 6, s. 7128-7141 14 s.

A Temperature-Dependent dVCE/dt model for Field-Stop IGBT at Turn-off Transient
Xue, P. & Davari, P., 1 jun. 2023, I: I E E E Journal of Emerging and Selected Topics in Power Electronics. 11, 3, s. 3173-3183 11 s.

Special Issue on Power Converters: Modelling, Control, and Applications
Rymarski, Z., Davari, P. & Kaczmarczyk, Z., jun. 2023, I: Applied Sciences. 13, 11, 3 s., 6565.

Convolutional Neural Network-Based Transformer Fault Diagnosis Using Vibration Signals
Li, C., Chen, J., Yang, C., Yang, J., Liu, Z. & Davari, P., 16 maj 2023, I: Sensors. 23, 10, 4781.

Power Electronic Applications in Power and Energy Systems
Anvari-Moghaddam, A., Davari, P. & Hegazy, O., mar. 2023, I: Applied Sciences (Switzerland). 13, 5, 3 s., 3110.

Online DC-Link Capacitance Monitoring for Digital-Controlled Boost PFC Converters Without Additional Sampling Devices
Zhao, Z., Davari, P., Lu, W. & Blaabjerg, F., jan. 2023, I: I E E E Transactions on Industrial Electronics. 70, 1, s. 907 - 920 14 s., 9724138.

Analyzing the Effect of Choke Placement on Differential-Mode Supra-Harmonics in Variable Frequency Drives: New Standardization
Ganjavi, A., Kumar, D., Zare, F. & Davari, P., 2023, *International Conference on "Sustainable Energy and Future Electric Transportation" (SEFET-2023).* IEEE (Institute of Electrical and Electronics Engineers), 10245535

Power Stacked Structure: Multi-Phase Interleaved Resonant Converter Based on Y-Connection Transformer
Shi, Z., Davari, P., Tang, Y., Pei, Y., Guo, Y. & Sun, H., 2023, *2023 25th European Conference on Power Electronics and Applications, EPE 2023 ECCE Europe.* IEEE (Institute of Electrical and Electronics Engineers), 10264517

Prediction of Radiated Emissions From a Fuel Cell Power Converter by Measuring the Common-Mode Current in the Attached Cable
Zaikin, D., Mikkelsen, S., Jonasen, S. & Davari, P., 2023, I: IEEE Access. 11, s. 930-949 20 s.

Reliability Improvement of Voltage Regulator Modules by a Virtual Series Voltage Source
Zhao, Z., Zhou, D., Wang, H., Davari, P. & Blaabjerg, F., dec. 2022, I: I E E E Transactions on Industrial Electronics. 69, 12, s. 12641-12652 12 s., 9677949.

High Power Factor Bridgeless Integrated Buck-Type PFC Converter With Wide Output Voltage Range
Chen, Z., Xu, J., Liu, X., Davari, P. & Wang, H., okt. 2022, I: I E E E Transactions on Power Electronics. 37, 10, s. 12577-12590 14 s.

Online Capacitance Monitoring for DC/DC Boost Converters Based on Low-Sampling-Rate Approach
Zhao, Z., Davari, P., Wang, Y. & Blaabjerg, F., okt. 2022, I: I E E E Journal of Emerging and Selected Topics in Power Electronics. 10, 5, s. 5192-5204 13 s., 9524616.

Real-Life Mission Profile-Oriented Lifetime Estimation of a SiC Interleaved Bidirectional HV DC/DC Converter for Electric Vehicle Drivetrains
Chakraborty, S., Hasan, M. M., McGahan, P., Tran, D.-D., Geury, T., Davari, P., Blaabjerg, F., El Baghdadi, M. & Hegazy, O., okt. 2022, I: I E E E Journal of Emerging and Selected Topics in Power Electronics. 10, 5, s. 5142-5167 26 s., 9440942.

A Systematic Control Design Method with Active Damping Control in Voltage Source Converters
Gholami-Khesht, H., Davari, P., Wu, C. & Blaabjerg, F., 5 sep. 2022, I: Applied Sciences. 12, 17, 22 s., 8893.

A Mixed Conduction Mode Controlled Bridgeless Boost PFC Converter and Its Mission Profile Based Reliability Analysis
Chen, Z., Xu, J., Davari, P. & Wang, H., aug. 2022, I: I E E E Transactions on Power Electronics. 37, 8, s. 9674-9686 13 s.

A Probabilistic Framework for the Robust Stability and Performance Analysis of Grid-Tied Voltage Source Converters
Gholami-Khesht, H., Davari, P., Novak, M. & Blaabjerg, F., 22 jul. 2022, I: Applied Sciences (Switzerland). 12, 15, 7375.

Modeling of Converter Synchronization Stability Under Grid Faults: The General Case
Taul, M. G., Golestan, S., Wang, X., Davari, P. & Blaabjerg, F., jun. 2022, I: I E E E Journal of Emerging and Selected Topics in Power Electronics. 10, 3, s. 2790 - 2804 15 s., 9201068.

Impedance Analysis of Single-Phase PFC Converter in the Frequency Range of 0–150 kHz
Davari, P. & Blaabjerg, F., maj 2022, *Proceedings of the 2022 International Power Electronics Conference (IPEC-Himeji 2022- ECCE Asia).* Himeji, Japan: IEEE (Institute of Electrical and Electronics Engineers), s. 2522-2528 7 s. 9807125

Robust optimization based harmonic mitigation method in islanded microgrids
Adineh, B., Keypour, R., Sahoo, S., Davari, P. & Blaabjerg, F., maj 2022, I: International Journal of Electrical Power & Energy Systems. 137, s. 1-9 9 s., 107631.

Common-Mode Current Prediction and Analysis in Motor Drive Systems for the New Frequency Range of 2–150 kHz
Ganjavi, A., Rathnayake, H., Zare, F., Kumar, D., Yaghoobi, J., Davari, P. & Abbosh, A., feb. 2022, I: I E E E Journal of Emerging and Selected Topics in Power Electronics. 10, 1, s. 74-90 17 s.

Overview of Power Electronic Converter Topologies Enabling Large-Scale Hydrogen Production via Water Electrolysis
Chen, M., Chou, S.-F., Blaabjerg, F. & Davari, P., feb. 2022, I: Applied Sciences. 12, 4, s. 1-12 12 s., 1906.

Differential Mode Noise Prediction and Analysis in Single-Phase Boost PFC for the New Frequency Range of 9–150 kHz
Esfetanaj, N. N., Wang, H., Blaabjerg, F. & Davari, P., jan. 2022, I: IEEE Journal of Emerging and Selected Topics in Industrial Electronics. 3, 1, s. 177-187 11 s., 9380362.

Aging Detection for Capacitors in Power Electronic Converters
Zhao, Z., Davari, P. & Wang, H., 2022, *Fault Analysis and its Impact on Grid-connected Photovoltaic Systems Perforamnce.* Haque, A. & Mekhilef, S. (red.). Wiley-IEEE press, s. 43-76

Effect of Choke Placement on Common-Mode Noise in Three-Phase Variable Speed Drives
Ganjavi, A., Kumar, D., Zare, F., Abbosh, A., Rathnayake, H. & Davari, P., 2022, I: I E E E Transactions on Industry Applications. 58, 5, s. 6253 - 6265 13 s.

Harmonic Mitigation Methods in Microgrids
Adineh, B., Keypour, R., Davari, P. & Blaabjerg, F., 2022, *Deregulated Electricity Structures and Smart Grids.* Khan, B., Prakash Mahela, O., Padmanaban, S. & Haes Alhelou, H. (red.). CRC Press, s. 25-46

Mathematical Model of Common-Mode Sources in Long-Cable-Fed Adjustable Speed Drives
Ganjavi, A., Zare, F., Kumar, D., Abbosh, A., Konstanty, B. & Davari, P., 2022, I: I E E E Transactions on Industry Applications. 58, 2, s. 2013-2028 16 s.

Robustness of Model-Predictive and Passivity-Based Control in the Three-Phase DC/AC Converter Application
Dyga, L., Alhasheem, M. A. M. Z. Y., Davari, P. & Rymarski, Z., 2022, I: Applied Sciences. 12, 9, 4329.

Voltage Control Scheme for Multilevel Interfacing PV Application: Real-Time MRAC-Based Approach
Orfi Yeganeh, M. S., Rahmani, M., Mijatovic, N., Dragicevic, T., Blaabjerg, F. & Davari, P., 2022, *24th European Conference on Power Electronics and Applications (EPE'22 ECCE Europe).* IEEE (Institute of Electrical and Electronics Engineers), 9907738

Voltage Control Scheme for Multilevel Inverters Interfacing PV Application: Real-Time MRAC-Based Approach
Orfi Yeganeh, M. S., Rahmani, M., Mijatovic, N., Dragicevic, T., Blaabjerg, F. & Davari, P., 2022, *2022 24th European Conference on Power Electronics and Applications (EPE'22 ECCE Europe).*

Robust H∞ Current Control of Three-Phase Grid-Connected Voltage Source Converters Using Linear Matrix Inequalities
Gholami-Khesht, H., Davari, P., Novak, M. & Blaabjerg, F., nov. 2021, *Proceedings of the 2021 IEEE 22nd Workshop on Control and Modelling of Power Electronics (COMPEL).* IEEE Press, s. 1-6 6 s. 9646071. (IEEE Workshop on Control and Modeling for Power Electronics (COMPEL)).

A Family of Redundant-Switch Configurations for Improving Fault-tolerant Feature of Power Converters
Rahimi, T., Jahan, H. K., Peyghami, S., Ding, L., Blaabjerg, F. & Davari, P., okt. 2021, *Proceedings of 2021 IEEE Energy Conversion Congress and Exposition (ECCE).* IEEE Press, s. 3592-3598 7 s. 9595308. (IEEE Energy Conversion Congress and Exposition).

An Online Parameters Monitoring Method for Output Capacitor of Buck Converter Based on Large-Signal Load Transient Trajectory Analysis

Zhao, Z., Lu, W., Davari, P., Du, X., Ho-Ching Iu, H. & Blaabjerg, F., aug. 2021, I: I E E E Journal of Emerging and Selected Topics in Power Electronics. 9, 4, s. 4004 - 4015 12 s., 8950189.

Reduced-Order and Aggregated Modeling of Large-Signal Synchronization Stability for Multi-Converter Systems
Taul, M. G., Wang, X., Davari, P. & Blaabjerg, F., jun. 2021, I: I E E E Journal of Emerging and Selected Topics in Power Electronics. 9, 3, s. 3150-3165 16 s., 9163174.

Reliability of Power Electronic Systems for EV/HEV Applications
Blaabjerg, F., Wang, H., Vernica, I., Liu, B. & Davari, P., jun. 2021, I: Proceedings of the IEEE. 109, 6, s. 1060-1076 17 s., 9250437.

Review of Harmonic Mitigation Methods in Microgrid: From a Hierarchical Control Perspective
Adineh, B., Kaypour, R., Davari, P. & Blaabjerg, F., jun. 2021, I: I E E E Journal of Emerging and Selected Topics in Power Electronics. 9, 3, s. 3044-3060 17 s., 9115600.

Bridgeless PFC Topology Simplification and Design for Performance Benchmarking
Chen, Z., Liu, B., Yang, Y., Davari, P. & Wang, H., maj 2021, I: I E E E Transactions on Power Electronics. 36, 5, s. 5398-5414 17 s., 9211796.

An Overview of Condition Monitoring Techniques for Capacitors in DC-Link Applications
Zhao, Z., Davari, P., Lu, W., Wang, H. & Blaabjerg, F., apr. 2021, I: I E E E Transactions on Power Electronics. 36, 4, s. 3692-3716 25 s., 9195018.

Differential Mode Noise Estimation and Filter Design for Interleaved Boost Power Factor Correction Converters
Esfetanaj, N. N., Wang, H., Blaabjerg, F. & Davari, P., 2 mar. 2021, I: Applied Sciences. 11, 6, 2716.

A Multistructure Multimode Three-Phase Dual-Active-Bridge Converter Targeting Wide-Range High-Efficiency Performance
Zia Khan, A., Pang Chan, Y., Yaqoob, M., Loo, K.-H., Davari, P. & Blaabjerg, F., mar. 2021, I: I E E E Transactions on Power Electronics. 36, 3, s. 3078-3098 21 s., 9161275.

Influence of phase-locked loop aggregation on the dynamic aggregation of wind farm strings with heterogeneous parameters
Taul, M. G., Wang, X., Davari, P. & Blaabjerg, F., mar. 2021, I: IET Energy Systems Integration. 3, 1, s. 99-108 10 s.

Reliability Analysis of Capacitors in Voltage Regulator Modules with Consecutive Load Transients
Zhao, Z., Zhou, D., Davari, P., Fang, J. & Blaabjerg, F., mar. 2021, I: I E E E Transactions on Power Electronics. 36, 3, s. 2481-2487 7 s., 9167458.

An Optimized Hybrid Modulation Scheme for Reducing Conduction Losses in Dual Active Bridge Converters
Liu, B., Davari, P. & Blaabjerg, F., feb. 2021, I: I E E E Journal of Emerging and Selected Topics in Power Electronics. 9, 1 , s. 921-936 16 s., 8915697.

An Adaptive Model Predictive Voltage Control for LC-Filtered Voltage Source Inverters
Gholami-Khesht, H., Davari, P. & Blaabjerg, F., 9 jan. 2021, I: Applied Sciences. 11, 2, s. 1-13 13 s., 704.

Nonlinear C_{oss}-V_{DS} Profile based ZVS Range Calculation for Dual Active Bridge Converters
Liu, B., Davari, P. & Blaabjerg, F., jan. 2021, I: I E E E Transactions on Power Electronics. 36, 1, s. 45-50 6 s., 9119872.

Adaptive Control in Power Electronics Systems
Gholami-Khesht, H., Davari, P. & Blaabjerg, F., 2021, *Control of Power Electronic Converters and Systems.* Academic Press, Bind 3. s. 125-147 27 s.

A Practical Approach to Model a Cable with Nonlinear Material Characteristics
Ganjavi, A., Zare, F., Kumar, D., Abbosh, A., Konstanty, B. & Davari, P., 2021, *2021 IEEE 19th International Power Electronics and Motion Control Conference (PEMC).* s. 637-643 7 s. 9432586

A Single-Phase Reduced Component Count Asymmetrical Multilevel Inverter Topology
Orfi Yeganeh, M. S., Davari, P., Chub, A., Mijatovic, N., Dragicevic, T. & Blaabjerg, F., 2021, I: I E E E Journal of Emerging and Selected Topics in Power Electronics. 9, 6, s. 6780-6790 11 s.

Differential mode noise prediction and analysis in single and three phase grid-tied inverters for the frequency range of 9-150 kHz
Esfetanaj, N. N., Meyer, J., Wang, H., Blaabjerg, F. & Davari, P., 2021, *2021 23rd European Conference on Power Electronics and Applications (EPE'21 ECCE Europe).* s. 1-10

Frequency-Security Constrained Control of Power Electronic-Based Generation Systems
Steinkohl, J., Peyghami, S., Wang, X., Davari, P. & Blaabjerg, F., 2021, I: IET Renewable Power Generation. 15, 10, s. 2246-2256 11 s.

Fuzzy-Based Frequency Security Evaluation of Wind-Integrated Power Systems
Steinkohl, J., Peyghami, S., Wang, X., Davari, P. & Blaabjerg, F., 2021, I: IET Energy Systems Integration. 3, 4, s. 451-463 13 s.

Mission Profile Based Reliability Analysis of A Bridgeless Boost PFC
Chen, Z., Davari, P. & Wang, H., 2021, *2021 IEEE Applied Power Electronics Conference and Exposition, APEC 2021.* s. 1815-1821 7 s. (I E E E Applied Power Electronics Conference and Exposition. Conference Proceedings).

On-site Power Generation for Data Centers: Integrating Data Centers with Low Carbon Energy Assets
Ahmadikordkheili, R., Hinkle, T., Gandhi, M., Van der Pas, N. & Davari, P., 2021

Power Converter Impedance and Emission Characterization Below 150 kHz
Jensen, P. T. & Davari, P., 2021, *2021 Joint IEEE International Symposium on Electromagnetic Compatibility Signal and Power Integrity, and EMC Europe, EMC/SI/PI/EMC Europe 2021.* s. 255-260 6 s.

Sliding Mode Controllers in Power Electronics Systems
Gholami-Khesht, H., Davari, P. & Blaabjerg, F., 2021, *Control of Power Electronic Converters and Systems.* Academic Press, Bind 3. s. 77-99 25 s.

Assessment Accuracy of Power System Frequency Security with Additional Frequency Controls in Wind Turbines
Steinkohl, J., Wang, X., Davari, P. & Blaabjerg, F., 14 dec. 2020, I: IET Renewable Power Generation. 14, 17, s. 3439-3447 9 s.

Current Reference Generation based on Next Generation Grid Code Requirements of Grid-Tied Converters during Asymmetrical Faults
Taul, M. G., Wang, X., Davari, P. & Blaabjerg, F., dec. 2020, I: IEEE Journal of Emerging and Selected Topics in Power Electronics. 8, 4, s. 3784-3797 14 s., 8779660.

Optimization Design and Control of Single-Stage Single-Phase PV Inverters for MPPT Improvement
Guo, B., Su, M., Sun, Y., Wang, H., Liu, B., Zhang, X., Pou, J., Yang, Y. & Davari, P., dec. 2020, I: I E E E Transactions on Power Electronics. 35, 12, s. 13000-13016 17 s., 9079646.

An Online Monitoring Method for Output Capacitors of DC/DC Boost Converters
Zhao, Z., Lu, W., Davari, P. & Blaabjerg, F., 30 nov. 2020, *2020 IEEE 21st Workshop on Control and Modeling for Power Electronics (COMPEL).* IEEE (Institute of Electrical and Electronics Engineers), s. 1-7 7 s. (IEEE Workshop on Control and Modeling for Power Electronics (COMPEL)).

Performance enhancement of photovoltaic system under grid voltage distortion utilising total least-square control scheme
Kumar, A., Patel, N., Gupta, N., Gupta, V. & Davari, P., 4 nov. 2020, I: IET Power Electronics. 13, 14, s. 3044-3055 12 s.

Improved harmonic injection pulse-width modulation variable frequency triangular carrier scheme for multilevel inverters
Orfi Yeganeh, M. S., Sarvi, M., Blaabjerg, F. & Davari, P., nov. 2020, I: IET Power Electronics. 13, 14, s. 3146-3154 9 s.

Differential Model EMI Filter Analysis for Interleaved Boost PFC Converters Considering Optimal Phase Shifting
Esfetanaj, N. N., saad, Y., Ahmad Sakaria, O., Wang, H. & Davari, P., okt. 2020, *2020 22nd European Conference on Power Electronics and Applications (EPE'20 ECCE Europe).* IEEE, 10 s. 9215730

Harmonics Mitigation and Non-Ideal Voltage Compensation Utilizing Active Power Filter Based On Predictive Current Control
Alhasheem, M. A. M. Z. Y., Mattavelli, P. & Davari, P., okt. 2020, I: IET Power Electronics. 13, 13, s. 2782 – 2793 12 s.

Special issue: Harmonic mitigation techniques and grid robustness in power electronic-based power systems
Ozsoy, E., Blaabjerg, F., Davari, P., Holm-Nielsen, J. B., Kumar, D., Šabanović, A. & Sanjeevikumar, P., okt. 2020, I: IET Power Electronics. 13, 13, s. 2679-2681 3 s.

Adaptive Predictive-DPC for LCL-Filtered Grid Connected VSC with Reduced Number of Sensors
Gholami-Khesht, H., Davari, P. & Blaabjerg, F., sep. 2020, *The 22nd European Conference on Power Electronics and Applications (EPE'20 ECCE Europe).* s. 1-10 10 s. 9215839

Effect of Unipolar and Bipolar SPWM on the Lifetime of DC-link Capacitors in Single-Phase Voltage Source Inverters
Baburajan, S., Davari, P., Peyghami, S., Blaabjerg, F. & Kumar, D., sep. 2020, *2020 22nd European Conference on Power Electronics and Applications, EPE 2020 ECCE Europe.* IEEE Signal Processing Society, 9215656. (2020 22nd European Conference on Power Electronics and Applications, EPE 2020 ECCE Europe).

Model Predictive Control of Grid Forming Converters with Enhanced Power Quality
Alhasheem, M. A. M. Z. Y., Abdelhakim, A., Blaabjerg, F., Mattavelli, P. & Davari, P., sep. 2020, I: Applied Sciences. 10, 18, 25 s., 6390.

Single-phase Bridgeless PFC Topology Derivation and Performance Benchmarking
Chen, Z., Davari, P. & Wang, H., sep. 2020, I: I E E E Transactions on Power Electronics. 35, 9, s. 9239-9250 11 s.

DC-Link Loop Bandwidth Selection Strategy for Grid-Connected Inverters Considering Power Quality Requirements
Zarei, S. F., Mokhtari, H., Ghasemi, M. A., Peyghami, S., Davari, P. & Blaabjerg, F., jul. 2020, I: International Journal of Electrical Power & Energy Systems. 119, 105879.

An Enhanced Generalized Average Modeling of Dual Active Bridge Converters
Liu, B., Davari, P. & Blaabjerg, F., jun. 2020, *Proceedings of 35th Annual IEEE Applied Power Electronics Conference & Exposition (APEC 2020).* IEEE Press, s. 85-90 6 s. 9124001. (I E E E Applied Power Electronics Conference and Exposition. Conference Proceedings).

Current Limiting Control with Enhanced Dynamics of Grid-Forming Converters during Fault Conditions
Taul, M. G., Wang, X., Davari, P. & Blaabjerg, F., jun. 2020, I: IEEE Journal of Emerging and Selected Topics in Power Electronics. 8, 2, s. 1062-1073 12 s., 8779657.

Enhanced Zero-Voltage-Switching Conditions of Dual Active Bridge Converter under Light Load Situations
Liu, B., Davari, P. & Blaabjerg, F., jun. 2020, *35th Annual IEEE Applied Power Electronics Conference & Exposition (APEC 2020).* IEEE Press, s. 1374-1381 8 s. 9124213. (I E E E Applied Power Electronics Conference and Exposition. Conference Proceedings).

Time Domain Simulation of A Five-Phase BLDC Motor Drive
Rahimi, T., Ding, L., Peyghami, S., Kheshti, M., Blaabjerg, F. & Davari, P., maj 2020, *2020 11th Power Electronics, Drive Systems, and Technologies Conference, PEDSTC 2020.* 9088430

Control of Grid-Following Inverters under Unbalanced Grid Conditions
Zarei, S. F., Mokhtari, H., Ghasemi, M. A., Peyghami, S., Davari, P. & Blaabjerg, F., mar. 2020, I: I E E E Transactions on Energy Conversion. 35, 1, s. 184-192 9 s., 8859288.

Robust Fault Ride-Through of Converter-based Generation during Severe Faults with Phase Jumps
Taul, M. G., Wang, X., Davari, P. & Blaabjerg, F., jan. 2020, I: IEEE Transactions on Industry Applications. 56, 1, s. 570 - 583 14 s., 8851254.

Analysis of DC and AC Choke Effects on Common-Mode Noise Emissions in ASD at the Frequency Range of 9–150 kHz
Ganjavi, A., Rathnayake, H., Kumar, D., Zare, F., Abbosh, A. & Davari, P., 2020, *2020 IEEE International Conference on Power Electronics, Drives, and Energy Systems (PEDES 2020).* IEEE (Institute of Electrical and Electronics Engineers), s. 1-6 6 s. 9379827

Analytical Modeling of 9-150 kHz EMI in Three-Phase Active Rectifiers
Esfetanaj, N. N., peng, Y., Wang, H., Blaabjerg, F. & Davari, P., 2020, *2020 IEEE 21st Workshop on Control and Modeling for Power Electronics (COMPEL).* IEEE (Institute of Electrical and Electronics Engineers), 6 s. (IEEE Workshop on Control and Modeling for Power Electronics (COMPEL)).

Common mode noise modelling and resonant estimation in a three-phase motor drive system: 9-150 kHz frequency range
Rathnayake, H., Ganjavi, A., Zare, F., Kumar, D. & Davari, P., 2020, *2020 22nd European Conference on Power Electronics and Applications (EPE'20 ECCE Europe).* s. 1-10

Design and Optimization Methodology of Transformer for 700/400 V Series Resonant DC/DC Converters with Enhanced Power Density
Nielsen, A. B., Gerard Hurley, W., Davari, P., Duffy, M. & Blaabjerg, F., 2020, *IEEE Energy Conversion Congress and Exposition (ECCE) 2020.* IEEE (Institute of Electrical and Electronics Engineers), s. 3484-3491 (IEEE Energy Conversion Congress and Exposition).

Direct Adaptive Current Control of Grid-Connected Voltage Source Converters Based on the Lyapunov Theorem
Gholami-Khesht, H., Monfared, M., Taul, M. G., Davari, P. & Blaabjerg, F., 2020, *The 2020 IEEE 9th International Power Electronics and Motion Control Conference (IPEMC2020-ECCE Asia).* IEEE (Institute of Electrical and Electronics Engineers), s. 858-863 6 s. 9368224. (2020 IEEE 9th International Power Electronics and Motion Control Conference, IPEMC 2020 ECCE Asia).

Frequency-Freezing FLL for Enhanced Synchronization Stability of Grid-Following Converters during Grid Faults
Taul, M. G., Wang, X., Davari, P. & Blaabjerg, F., 2020, *2020 IEEE 21st Workshop on Control and Modeling for Power Electronics (COMPEL).* IEEE (Institute of Electrical and Electronics Engineers), s. 1-7 7 s. (IEEE Workshop on Control and Modeling for Power Electronics (COMPEL)).

Investigating the Effect of Different Parameters on Harmonics and EMI Emissions at the Frequency Range of 0–9 kHz
Ganjavi, A., Rathnayake, H., Zare, F., Kumar, D., Abbosh, A. & Davari, P., 2020, *2020 22nd European Conference on Power Electronics and Applications (EPE'20 ECCE Europe).* s. P.1-P.10

Nonlinear Effects of Three-phase Diode Rectifier on Noise Emission in the Frequency Range of 2–9 kHz
Rathnayake, H., Zare, F., Kumar, D., Ganjavi, A. & Davari, P., 2020, *2020 IEEE International Conference on Power Electronics, Drives, and Energy Systems (PEDES 2020).* IEEE (Institute of Electrical and Electronics Engineers), s. 1-6 6 s.

Power Density and Loss Optimization Design Methodology of a 10 kW 2-Level 3-Phase SiC Inverter
Nielsen, A. B., Davari, P., Blaabjerg, F. & Nielsen, B. V., 2020, *21th IEEE Workshop on Control and Modeling for Power Electronics (COMPEL) 2020.* IEEE (Institute of Electrical and Electronics Engineers), s. 1-7 (IEEE Workshop on Control and Modeling for Power Electronics (COMPEL)).

Standard Test Systems for Modern Power System Analysis: An Overview
Peyghami, S., Davari, P., Fotuhi-Firuzabad, M. & Blaabjerg, F., dec. 2019, I: I E E E Industrial Electronics Magazine. 13, 4 , s. 86 - 105 20 s., 8939187.

Decentralized Droop Control in DC Microgrids Based on a Frequency Injection Approach
Peyghami, S., Davari, P., Mokhtari, H. & Blaabjerg, F., nov. 2019, I: I E E E Transactions on Smart Grid. 10, 6, s. 6782 - 6791 10 s., 8691623.

Passivity-Based Control Design Methodology for UPS Systems
Rymarski, Z., Bernacki , K., Dyga , Ł. & Davari, P., nov. 2019, I: Energies. 12, 22, 19 s., 4301.

A Frequency Security Analysis of Wind Integrated Power Systems with Frequency Controls
Steinkohl, J., Wang, X., Davari, P. & Blaabjerg, F., okt. 2019, *Proceedings of 18th Wind Integration Workshop.* Energynautics, 8 s.

Analytical Modeling of 9-150 kHz EMI in Single-Phase PFC Converter
Esfetanaj, N. N., Peyghami, S., Wang, H. & Davari, P., okt. 2019, *Proceedings of IECON 2019 - 45th Annual Conference of the IEEE Industrial Electronics Society.* IEEE Press, (Proceedings of the Annual Conference of the IEEE Industrial Electronics Society).

An Overview of Assessment Methods for Synchronization Stability of Grid-Connected Converters under Severe Symmetrical Grid Faults
Taul, M. G., Wang, X., Davari, P. & Blaabjerg, F., okt. 2019, I: IEEE Transactions on Power Electronics. 34, 10, s. 9655-9670 16 s., 8632731.

Mission-Profile-Based System-Level Reliability Analysis in DC Microgrids
Peyghami, S., Wang, H., Davari, P. & Blaabjerg, F., 1 sep. 2019, I: I E E E Transactions on Industry Applications. 55, 5, s. 5055 - 5067 13 s., 8727971.

Performance Assessment of Grid Forming Converters Using Different Finite Control Set Model Predictive Control (FCS-MPC) Algorithms
Alhasheem, M. A. M. Z. Y., Blaabjerg, F. & Davari, P., 1 sep. 2019, I: Applied Sciences (Switzerland). 9, 17, s. 1-14 14 s., 3513.

System-Level Reliability-Oriented Power Sharing Strategy for DC Power Systems
Peyghami, S., Davari, P. & Blaabjerg, F., 1 sep. 2019, I: I E E E Transactions on Industry Applications. 55, 5, s. 4865 - 4875 11 s., 8718555.

Analysis of linear Phase-Locked Loops in Grid connected Power Converters
Steinkohl, J., Wang, X., Davari, P. & Blaabjerg, F., sep. 2019, *Proceedings of 2019 21st European Conference on Power Electronics and Applications (EPE '19 ECCE Europe).* Italy: IEEE Press, s. 1-10 10 s. 8915504

Failure Mode, Effects and Criticality Analysis (FMECA) in Power Electronic based Power Systems
Peyghami, S., Davari, P., Firuzabad, M. F. & Blaabjerg, F., sep. 2019, *Proceedings of 2019 21st European Conference on Power Electronics and Applications (EPE '19 ECCE Europe).* IEEE Press, s. 1-9 9 s. 8915061

IEEE Access Special Section Editorial: Power Quality and Harmonics Issues of Future and Smart Grids
Zare, F., Blaabjerg, F., Davari, P., Chang, G. W. & Adabi, J., sep. 2019, I: IEEE Access. 7, s. 132803-132805 3 s., 8847691.

Power Electronics Topology Comparison and Improvement for Low Voltage - High Current DC/AC Applications
Nielsen, A. B., Davari, P. & Blaabjerg, F., sep. 2019, *Proceedings of 2019 21st European Conference on Power Electronics and Applications (EPE '19 ECCE Europe).* Italy: IEEE Press, 10 s. 8915421

Systematic Approach for Transient Stability Evaluation of Grid-Tied Converters during Power System Faults
Taul, M. G., Wang, X., Davari, P. & Blaabjerg, F., sep. 2019, *2019 IEEE Energy Conversion Congress and Exposition, ECCE 2019.* IEEE Press, s. 5191-5198 8 s. 8912571. (IEEE Energy Conversion Congress and Exposition).

Wear-Out Failure of a Power Electronic Converter Under Inversion and Rectification Modes
Peyghami, S., Davari, P., Zhou, D., Fotuhi-Firuzabad, M. & Blaabjerg, F., sep. 2019, *Proceedings of 2019 IEEE Energy Conversion Congress and Exposition (ECCE).* IEEE Press, s. 1598-1604 7 s. 8913144. (IEEE Energy Conversion Congress and Exposition).

An Efficient Reduced-Order Model for Studying Synchronization Stability of Grid-Following Converters during Grid Faults
Taul, M. G., Wang, X., Davari, P. & Blaabjerg, F., jun. 2019, *Proceedings of 2019 20th Workshop on Control and Modeling for Power Electronics (COMPEL).* IEEE Press, 7 s. (IEEE Workshop on Control and Modeling for Power Electronics (COMPEL)).

Applications of Power Electronics: Volume 1
Blaabjerg, F. (Redaktør), Dragicevic, T. (Redaktør) & Davari, P. (Redaktør), jun. 2019, Special Issue udg. MDPI. 476 s. (Electronics).

High Voltage Gain Quasi-SEPIC DC-DC Converter
Siwakoti, Y. P., Mostaan, A., Abdelhakim, A., Davari, P., Soltani, M. N., Khan, N. H., Li, L. & Blaabjerg, F., jun. 2019, I: I E E E Journal of Emerging and Selected Topics in Power Electronics. 7, 2, s. 1243-1257 15 s., 8419732.

A Bridgeless Buck-flyback PFC Converter with High PF and Dead Angles Eliminated
Chen, Z., Davari, P. & Wang, H., maj 2019, *Proceedings of 2019 10th International Conference on Power Electronics and ECCE Asia (ICPE 2019 - ECCE Asia).* IEEE Press, s. 1420-1427 8 s. 8797303. (International Conference on Power Electronics).

Lifetime Estimation of DC-link Capacitors in Adjustable Speed Drives Under Grid Voltage Unbalances
Wang, H., Davari, P., Wang, H., Kumar, D., Zare, F. & Blaabjerg, F., maj 2019, I: I E E E Transactions on Power Electronics. 34, 5, s. 4064 - 4078 15 s., 8426003.

Reliability Assessment of Single-phase PV Inverters
Peyghami, S., Davari, P., Blaabjerg, F. & Abdelhakim, A., maj 2019, *Proceedings of 2019 10th International Conference on Power Electronics and ECCE Asia (ICPE 2019 - ECCE Asia).* Korea: IEEE Press, s. 3077-3083 7 s. 8796895. (International Conference on Power Electronics).

Applications of Power Electronics
Blaabjerg, F. (Redaktør), Dragicevic, T. (Redaktør) & Davari, P. (Redaktør), apr. 2019, Special Issue udg. MDPI Books. 7 s. (Electronics).

An Optimized Control Scheme to Reduce the Backflow Power and Peak Current in Dual Active Bridge Converters
Liu, B., Davari, P. & Blaabjerg, F., mar. 2019, *Proceedings of 2019 IEEE Annual Applied Power Electronics Conference and Exposition (APEC 2019).* USA: IEEE Press, s. 1622-1628 7 s. 8722273. (IEEE Applied Power Electronics Conference and Exposition (APEC)).

Applications of Power Electronics: Volume 2
Blaabjerg, F. (Redaktør), Dragicevic, T. (Redaktør) & Davari, P. (Redaktør), 2019, MDPI. 500 s.

A Flexible Control Scheme for Single-Stage DAB AC/DC Converters
Liu, B., Davari, P. & Blaabjerg, F., nov. 2018, *Proceedings of the IEEE International Power Electronics and Application Conference and Exposition (PEAC 2018).* China: IEEE Press, s. 1-6 6 s.

Single-stage Bridgeless Buck-boost PFC Converter with DC Split for Low Power LED Applications
Chen, Z., Davari, P. & Wang, H., nov. 2018, *2018 IEEE International Power Electronics and Application Conference and Exposition (PEAC).* IEEE (Institute of Electrical and Electronics Engineers), 6 s.

Analysis of Multi-Drive System Performance Under Unbalanced Grid Using Different Grid Synchronization Solutions
Song, Y., Davari, P. & Blaabjerg, F., 30 okt. 2018, *Proceedings of 2018 20th European Conference on Power Electronics and Applications (EPE'18 ECCE Europe).* IEEE (Institute of Electrical and Electronics Engineers), s. 1-9 9 s. 8515421

A Review on Fault Current Limiting Devices to Enhance the Fault Ride-Through Capability of the Doubly-Fed Induction Generator Based Wind Turbine
Naderi, S. B., Davari, P., Zhou, D., Negnevitsky, M. & Blaabjerg, F., okt. 2018, I: Applied Sciences. 8, 11, s. 1-24 24 s., 2059.

Efficiency Enhancement of Bridgeless Buck-Boost PFC Converter with Unity PF and DC Split to Reduce Voltage Stresses
Chen, Z., Liu, B., Davari, P. & Wang, H., okt. 2018, *Proceedings of the IECON 2018 - 44th Annual Conference of the IEEE Industrial Electronics Society.* IEEE Press, s. 1187-1192 6 s. (Proceedings of the Annual Conference of the IEEE Industrial Electronics Society).

Evaluation of Flicker Measurement in Grid-connected Wind Turbine
Khan, N., Farooq, U., Wang, X., Helle, L. & Davari, P., okt. 2018, *Proceedings of 2018 IEEE PES Asia-Pacific Power and Energy Engineering Conference (APPEEC).* IEEE Press, s. 633-639 7 s. (Asia-Pacific Power and Energy Engineering Conference (APPEEC)).

Improving Performance of Three-Phase Slim DC-Link Drives Utilizing Virtual Positive Impedance-Based Active Damping Control
Aksoz, A., Song, Y., Saygin , A., Blaabjerg, F. & Davari, P., okt. 2018, I: Electronics. 7, 10, s. 1-14 14 s., 234.

System-level Reliability Enhancement of DC/DC Stage in a Single-Phase PV Inverter
Peyghami, S., Davari, P., Wang, H. & Blaabjerg, F., 1 sep. 2018, I: Microelectronics Reliability. 88-90, s. 1030-1035 6 s.

An Optimized Control Scheme for Reducing Conduction and Switching Losses in Dual Active Bridge Converters
Liu, B., Davari, P. & Blaabjerg, F., sep. 2018, *Proceedings of the IEEE Energy Conversion Congress and Exposition (ECCE 2018).* USA: IEEE (Institute of Electrical and Electronics Engineers), s. 622-629 8 s. (IEEE Energy Conversion Congress and Exposition).

Grid Synchronization of Wind Turbines during Severe Symmetrical Faults with Phase Jumps
Taul, M. G., Wang, X., Davari, P. & Blaabjerg, F., sep. 2018, *Proceedings of 2018 IEEE Energy Conversion Congress and Exposition (ECCE).* IEEE Press, s. 38-45 8 s. (IEEE Energy Conversion Congress and Exposition).

Investigation of acoustic emission as a non-invasive method for detection of power semiconductor aging
Davari, P., Kristensen, O. D. & Iannuzzo, F., sep. 2018, I: Microelectronics Reliability. 88-90, s. 545-549 5 s.

Mission Profile Based Power Converter Reliability Analysis in a DC Power Electronic Based Power System
Peyghami, S., Wang, H., Davari, P. & Blaabjerg, F., sep. 2018, *Proceedings of the IEEE Energy Conversion Congress and Exposition (ECCE 2018).* USA: IEEE Press, s. 4122 - 4128 7 s. (IEEE Energy Conversion Congress and Exposition).

Parallel Operation of Dual VSCs Regulated by FCS-MPC Using Droop Control Approach
Al hasheem, M., Dragicevic, T., Blaabjerg, F. & Davari, P., sep. 2018, *Proceedings of 2018 20th European Conference on Power Electronics and Applications (EPE'18 ECCE Europe).* IEEE Press, s. 1-10 10 s. 8515391

Reliability and Risk Assessment in a Power Electronic Based Power System (PEPS): Using Non-Constant Failure Rates of Converters
Peyghami, S., Davari, P., Wang, H. & Blaabjerg, F., sep. 2018, *Proceedings of 2018 20th European Conference on Power Electronics and Applications (EPE'18 ECCE Europe).* Latvia: IEEE Press, s. 1-10 10 s. 8515430

Study on Application of New Approach of Fault Current Limiters in Fault Ride through Capability Improvement of DFIG Based Wind Turbine
Naderi, S. B., Davari, P., Zhou, D., Negnevitsky, M. & Blaabjerg, F., aug. 2018, *Proceedings of the IEEE Power & Energy Society General Meeting (PESGM 2018).* USA: IEEE (Institute of Electrical and Electronics Engineers), s. 1-5 5 s. (IEEE

Power and Energy Society General Meeting).

Analysis and Design of the Quasi-Z-Source Inverter for Wide Range of Operation
Abdelhakim, A., Davari, P., Blaabjerg, F. & Mattavelli, P., jun. 2018, *Proceedings of the 2018 IEEE 19th Workshop on Control and Modeling for Power Electronics (COMPEL).* IEEE Press, s. 1-6 6 s. 8458486. (IEEE Workshop on Control and Modeling for Power Electronics (COMPEL)).

Characterization of Proportional-Integral-Resonant Compensator for DC Link Voltage Control
Zarei, S. F., Ghasemi, M. A., Peyghami, S., Davari, P., Mokhtari, H. & Blaabjerg, F., jun. 2018, *Proceedings of the 19th IEEE Workshop on Control and Modeling for Power Electronics (COMPEL 2018).* IEEE Press, s. 1-8 8 s. 8460151

The Impact of Topology and Mission Profile on the Reliability of Boost-type Converters in PV Applications
Peyghami, S., Davari, P., Wang, H. & Blaabjerg, F., jun. 2018, *Proceedings of the 19th IEEE Workshop on Control and Modeling for Power Electronics (COMPEL).* Italy: IEEE Press, s. 1-8 8 s. 8460177. (IEEE Workshop on Control and Modeling for Power Electronics (COMPEL)).

Centralized Control of Modular Multi Rectifier for Motor Drive Applications under Unbalanced Grid
Song, Y., Davari, P. & Blaabjerg, F., maj 2018, *Proceedings of 2018 International Power Electronics Conference (IPEC-Niigata 2018 -ECCE Asia).* Japan: IEEE Press, s. 746 - 752 7 s. 8507950

Distributed Primary and Secondary Power Sharing in a Droop-Controlled LVDC Microgrid with Merged AC and DC Characteristics
Peyghami, S., Mokhtari, H., Loh, P. C., Davari, P. & Blaabjerg, F., maj 2018, I: IEEE Transactions on Smart Grid. 9, 3, s. 2284 - 2294 11 s.

Switching Loss Reduction in the Three-Phase Quasi-Z-Source Inverters Utilizing Modified Space Vector Modulation Strategies
Abdelhakim, A., Davari, P., Blaabjerg, F. & Mattavelli, P., maj 2018, I: I E E E Transactions on Power Electronics. 33, 5, s. 4045-4060 16 s., 7962224.

Load-Independent Harmonic Mitigation in SCR-Fed Three-Phase Multiple Adjustable Speed Drive Systems with Deliberately Dispatched Firing Angles
Yang, Y., Davari, P., Blaabjerg, F. & Zare, F., apr. 2018, I: IET Power Electronics. 11, 4, s. 727-734 8 s.

Improving 9-150 kHz EMI Performance of Single-Phase PFC Rectifier
Davari, P., Hoene, E., Zare, F. & Blaabjerg, F., mar. 2018, *Proceedings of CIPS 2018 - 10th International Conference on Integrated Power Electronics Systems.* VDE Verlag GMBH, s. 512-517 6 s.

Lifetime Benchmarking of Two DC-link Passive Filtering Configurations in Adjustable Speed Drives
Wang, H., Davari, P., Wang, H., Kumar, D., Zare, F. & Blaabjerg, F., mar. 2018, *Proceedings of the 2018 IEEE Applied Power Electronics Conference and Exposition (APEC).* IEEE Press, s. 228-233 6 s. (IEEE Applied Power Electronics Conference and Exposition (APEC)).

System-Level Lifetime-Oriented Power Sharing Control of Paralleled DC/DC Converters
Peyghami, S., Davari, P. & Blaabjerg, F., mar. 2018, *APEC 2018 - 33rd Annual IEEE Applied Power Electronics Conference and Exposition.* IEEE Press, s. 1890-1895 6 s. (IEEE Applied Power Electronics Conference and Exposition (APEC)).

Effects of modulation techniques on the input current interharmonics of Adjustable Speed Drives
Soltani, H., Davari, P., Zare, F. & Blaabjerg, F., jan. 2018, I: I E E E Transactions on Industrial Electronics. 65, 1, s. 167 - 178 12 s., 7962185.

Performance Evaluation of the Single-Phase Split-Source Inverter Using an Alternative DC-AC Configuration
Abdelhakim, A., Mattavelli, P., Davari, P. & Blaabjerg, F., jan. 2018, I: I E E E Transactions on Industrial Electronics. 65, 1 , s. 363 - 373 11 s., 7945503.

Active Rectifiers and Their Control
Davari, P., Zare, F. & Abdelhakim, A., 2018, *Control of Power Electronic Converters and Systems.* Blaabjerg, F. (red.). Academic Press, Bind 2. s. 3-52 50 s.

Enhanced Frequency Droop Method for Load Sharing in LVDC Power Systems
Peyghami, S., Davari, P. & Blaabjerg, F., 2018, *9th Annual International Power Electronics, Drive Systems, and Technologies Conference, PEDSTC 2018.* IEEE Press, s. 358-362 5 s.

A Modular Active Front-End Rectifier with Electronic Phase-Shifting for Harmonic Mitigation in Motor Drive Applications
Zare, F., Davari, P. & Blaabjerg, F., nov. 2017, I: I E E E Transactions on Industry Applications. 53, 6, s. 5440 - 5450 11 s.

A Novel Passive Islanding Detection Scheme for Distributed Generations Based on Rate of Change of Positive Sequence Component of Voltage and Current
Rostami, A., Jalilian, A., Naderi, S. B., Negnevitsky, M., Davari, P. & Blaabjerg, F., nov. 2017, *Proceedings of 2017 Australasian Universities Power Engineering Conference (AUPEC).* IEEE Press, 5 s. (Proceedings of Australasian Universities Power Engineering Conference (AUPEC), Bind 2017).

Characterization of Input Current Interharmonics in Adjustable Speed Drives
Soltani, H., Davari, P., Zare, F., Loh, P. C. & Blaabjerg, F., nov. 2017, I: I E E E Transactions on Power Electronics. 32, 11 , s. 8632 - 8643 12 s.

Investigation on Capacitor Switching Transient Limiter with a Three phase Variable Resistance
Naderi, S. B., Jafari, M., Zandnia, A., Jalilian, A., Davari, P., Negnevitsky, M. & Blaabjerg, F., nov. 2017, *Proceedings of 2017 Australasian Universities Power Engineering Conference (AUPEC).* IEEE Press, 6 s. (Proceedings of Australasian Universities Power Engineering Conference (AUPEC), Bind 2017).

An improved modulation strategy for the three-phase Z-source inverters (ZSIs)
Abdelhakim, A., Davari, P., Blaabjerg, F. & Mattavelli, P., okt. 2017, *Proceedings of 2017 IEEE Energy Conversion Congress and Exposition (ECCE).* IEEE Press, s. 4237-4243 7 s. (IEEE Energy Conversion Congress and Exposition).

Capacitance estimation algorithm based on DC-link voltage harmonics using artificial neural network in three-phase motor drive systems
Soliman, H. A. H., Davari, P., Wang, H. & Blaabjerg, F., okt. 2017, *Proceedings of 2017 IEEE Energy Conversion Congress and Exposition (ECCE).* IEEE Press, s. 5795-5802 8 s.

Dynamic and Control Analysis of Modular Multi-Parallel Rectifiers (MMR)
Zare, F., Ghosh, A., Davari, P. & Blaabjerg, F., okt. 2017, *Proceedings of the 2017 IEEE Energy Conversion Congress and Exposition (ECCE).* IEEE Press, s. 1701-1707 7 s.

Effects of DC-link Filter on Harmonic and Interharmonic Generation in Three-phase Adjustable Speed Drive Systems
Soltani, H., Davari, P., Kumar, D., Zare, F. & Blaabjerg, F., okt. 2017, *Proceedings of 2017 IEEE Energy Conversion Congress & Exposition (ECCE).* IEEE Press, s. 675-681 7 s. (IEEE Energy Conversion Congress and Exposition).

Harmonic Distortion Performance of Multi Three-Phase SCR-Fed Drive Systems with Controlled DC-Link Current under Unbalanced Grid
Soltani, H., Davari, P., Blaabjerg, F. & Zare, F., okt. 2017, *Proceedings of 43rd Annual Conference of the IEEE Industrial Electronics Society, IECON 2017.* IEEE Press, s. 1210-1214 5 s. (Proceedings of the Annual Conference of the IEEE Industrial Electronics Society, Bind 43).

Synchronverter-Enabled DC Power Sharing Approach for LVDC Microgrids
Peyghami, S., Davari, P., Mokhtari, H., Loh, P. C. & Blaabjerg, F., okt. 2017, I: I E E E Transactions on Power Electronics. 32, 10, s. 8089 - 8099 11 s.

The Impact of Grid Unbalances on the Reliability of DC-link Capacitors in a Motor Drive
Wang, H., Davari, P., Kumar, D., Zare, F. & Blaabjerg, F., okt. 2017, *Proceedings of 2017 IEEE Energy Conversion Congress and Exposition (ECCE).* IEEE Press, s. 4345-4350 6 s.

On Secondary Control Approaches for Voltage Regulation in DC Microgrids
Peyghami, S., Mokhtari, H., Davari, P., Loh, P. C. & Blaabjerg, F., sep. 2017, I: I E E E Transactions on Industry Applications. 53, 5, s. 4855 - 4862 8 s.

Active DaMPing control methods for three-phase slim DC-link drive system
Yang, F., Wang, D., Blaabjerg, F., Wang, X., Davari, P. & Lu, K., 25 jul. 2017, *Proceedings of the 2017 IEEE 3rd International Future Energy Electronics Conference and ECCE Asia (IFEEC 2017 - ECCE Asia).* IEEE Press, s. 2165-2170 6 s. 7992387

Enhanced Phase-Shifted Current Control for Harmonic Cancellation in Three-Phase Multiple Adjustable Speed Drive Systems
Yang, Y., Davari, P., Zare, F. & Blaabjerg, F., apr. 2017, I: I E E E Transactions on Power Delivery. 32, 2, s. 996-1004 9 s.

Energy Saving and Efficient Energy Use By Power Electronic Systems
Blaabjerg, F., Wang, H., Davari, P., Qu, X. & Zare, F., 10 mar. 2017, *Energy Harvesting and Energy Efficiency: Technology, Methods and Applications.* Bizon, N., Tabatabaei, N. M., Blaabjerg, F. & Kurt, E. (red.). Springer, s. 1-14 14 s. (Lecture Notes in Energy, Bind 37).

Analysis of Three-Phase Rectifier Systems with Controlled DC-Link Current Under Unbalanced Grids
Kumar, D., Davari, P., Zare, F. & Blaabjerg, F., mar. 2017, *Proceedings of the 2017 IEEE Applied Power Electronics Conference and Exposition (APEC).* IEEE Press, s. 2179-2186 8 s.

Performance Evaluation of Electronic Inductor-Based Adjustable Speed Drives with Respect to Line Current Interharmonics
Soltani, H., Davari, P., Blaabjerg, F. & Zare, F., mar. 2017, *Proceedings of the 2017 IEEE Applied Power Electronics Conference and Exposition (APEC).* IEEE Press, s. 3171-3178 8 s. (IEEE Applied Power Electronics Conference and Exposition (APEC), Bind 2017).

Dissimilar trend of nonlinearity in ultrasound transducers and systems at resonance and non-resonance frequencies
Ghasemi, N., Zare, F., Davari, P., Vilathgamuwa, M., Ghosh, A., Langton, C. & Weber, P., feb. 2017, I: Ultrasonics. 74, s. 21-29 9 s.

Harmonic Emissions of Three-Phase Diode Rectifiers in Distribution Networks
Zare, F., Soltani, H., Kumar, D., Davari, P., Miranda, H. & Blaabjerg, F., 2017, I: IEEE Access. 5, s. 2819 - 2833 15 s.

A robust adaptive load frequency control for micro-grids
Khooban, M. H., Niknam, T., Blaabjerg, F., Davari, P. & Dragicevic, T., nov. 2016, I: ISA Transactions. 65, s. 220–229 10 s.

Family of Step-up DC/DC Converters with Fast Dynamic Response for Low Power Applications
N. Soltani, M., Mostaan, A., Siwakoti, Y. P., Davari, P. & Blaabjerg, F., nov. 2016, I: IET Power Electronics. 9, 14, s. 2665 - 2673 9 s.

Analysis of Harmonics Suppression by Active Damping Control on Multi Slim DC-link Drives
Yang, F., Máthé, L., Lu, K., Blaabjerg, F., Wang, X. & Davari, P., okt. 2016, *Proceedings of Industrial Electronics Society, IECON 2016 - 42nd Annual Conference.* IEEE Press, s. 5001 - 5006 6 s.

A Multi-Pulse Front-End Rectifier System with Electronic Phase-Shifting for Harmonic Mitigation in Motor Drive Applications
Zare, F., Davari, P. & Blaabjerg, F., sep. 2016, *Proceedings of 8th Annual IEEE Energy Conversion Congress & Exposition (ECCE 2016)* . IEEE Press, 8 s.

A New Secondary Control Approach for Voltage Regulation in DC Microgrids
Peyghami, S., Mokhtari, H., Davari, P., Loh, P. C. & Blaabjerg, F., sep. 2016, *Proceedings of IEEE Energy Conversion Congress and Exposition (ECCE), 2016.* IEEE Press, 6 s.

A Review of Electronic Inductor Technique for Power Factor Correction in Three-Phase Adjustable Speed Drives
Davari, P., Yang, Y., Zare, F. & Blaabjerg, F., sep. 2016, *Proceedings of IEEE Energy Conversion Congress and Exposition (ECCE), 2016.* IEEE Press, 8 s.

Energy Saving in Three-Phase Diode Rectifiers Using EI Technique with Adjustable Switching Frequency Scheme
Davari, P., Zare, F., Yang, Y., Kumar, D. & Blaabjerg, F., sep. 2016, *Proceedings of 18th European Conference on Power Electronics and Applications (EPE'16 ECCE Europe), 2016.* IEEE Press, 10 s.

Power-Quality-Oriented Optimization in Multiple Three-Phase Adjustable Speed Drives
Yang, Y., Davari, P., Blaabjerg, F. & Zare, F., sep. 2016, *Proceedings of the 8th Annual IEEE Energy Conversion Congress and Exposition, ECCE 2016.* IEEE Press, s. 1-8 8 s.

Predictive Pulse Pattern Current Modulation Scheme for Harmonic Reduction in Three-Phase Multidrive Systems
Davari, P., Yang, Y., Zare, F. & Blaabjerg, F., sep. 2016, I: I E E E Transactions on Industrial Electronics. 63, 9, s. 5932-5942 11 s.

Smart Power Management of DC Microgrids in Future Milligrids
Peyghami, S., Mokhtari, H., Davari, P., Loh, P. C. & Blaabjerg, F., sep. 2016, *Proceedings of 18th European Conference on Power Electronics and Applications (EPE'16 ECCE Europe), 2016.* IEEE Press, 10 s.

Pulse Pattern-Modulated Strategy for Harmonic Current Components Reduction in Three-Phase AC–DC Converters
Davari, P., Zare, F. & Blaabjerg, F., jul. 2016, I: I E E E Transactions on Industry Applications. 52, 4, s. 3182-3192 11 s.

Adjustable Speed Drives and Power Quality: Challenges and Cost-Effective Opportunities
Davari, P., Yang, Y., Zare, F. & Blaabjerg, F., maj 2016, *Proceedings of the 2016 8th International Power Electronics and Motion Control Conference - ECCE Asia (IPEMC 2016-ECCE Asia).* IEEE Press, s. 2594 - 2601 8 s.

Deliberately dispatched SCR firing angles for harmonic mitigation in three-phase multi-drive systems without communication
Yang, Y., Davari, P., Zare, F. & Blaabjerg, F., apr. 2016, *Proceedings of The 8th International Conference on Power Electronics, Machines, and Drives (PEMD 2016).* Institution of Engineering and Technology (IET), 6 s.

A DC-Link Modulation Scheme with Phase-Shifted Current Control for Harmonic Cancellations in Multidrive Applications
Yang, Y., Davari, P., Zare, F. & Blaabjerg, F., mar. 2016, I: IEEE Transactions on Power Electronics. 31, 3, s. 1837-1840 4 s.

Addressing the Unbalance Loading Issue in Multi-Drive Systems with A DC-Link Modulation Scheme for Harmonic Reduction
Yang, Y., Davari, P., Zare, F. & Blaabjerg, F., mar. 2016, *Proceedings of the 31st Annual IEEE Applied Power Electronics Conference and Exposition (APEC).* IEEE (Institute of Electrical and Electronics Engineers), s. 221-228 8 s.

A Multipulse Pattern Modulation Scheme for Harmonic Mitigation in Three-Phase Multimotor Drives
Davari, P., Yang, Y., Zare, F. & Blaabjerg, F., mar. 2016, I: I E E E Journal of Emerging and Selected Topics in Power Electronics. 4, 1, s. 174-185 12 s.

Input current interharmonics in adjustable speed drives caused by fixed-frequency modulation techniques
Soltani, H., Davari, P., Loh, P. C., Blaabjerg, F. & Zare, F., mar. 2016, *Proceedings of IEEE Applied Power Electronics Conference and Exposition 2016 (APEC).* IEEE Press, s. 229-235 7 s.

Energy saving and efficient energy use by power electronic systems
Blaabjerg, F., Wang, H., Davari, P., Qu, X. & Zare, F., dec. 2015, *Proceedings of the World Engineering Conference and Convention 2015 (WECC 2015).* Japan Federation of Engineering Societies, s. 1-6 6 s.

Investigating Pulsed Discharge Polarity Employing Solid-State Pulsed Power Electronics
Davari, P., Zare, F. & Blaabjerg, F., 26 nov. 2015, I: Electric Power Components & Systems. 43, 19, s. 2214-2222 9 s.

Performance evaluation of non-thermal plasma on particulate matter, ozone and CO2 correlation for diesel exhaust emission reduction
Babaie, M., Davari, P., Talebizadeh, P., Zare, F., Rahimzadeh, H., Ristovski, Z. & Brown, R., 15 sep. 2015, I: Chemical Engineering Journal. 276, s. 240-248 9 s.

A Novel Harmonic Elimination Approach in Three-Phase Multi-Motor Drives
Davari, P., Yang, Y., Zare, F. & Blaabjerg, F., sep. 2015, *Proceedings of the 2015 IEEE Energy Conversion Congress and Exposition (ECCE).* IEEE Press, s. 7001-7008 8 s.

A Smart Current Modulation Scheme for Harmonic Reduction in Three- Phase Motor Drive Applications
Davari, P., Zare, F. & Blaabjerg, F., sep. 2015, *Proceedings of the 2015 17th European Conference on Power Electronics and Applications (EPE'15 ECCE-Europe).* IEEE Press, s. 1-10 10 s.

Pulse pattern modulated strategy for harmonic current components reduction in three-phase AC-DC converters
Davari, P., Zare, F. & Blaabjerg, F., sep. 2015, *Proceedings of the 2015 IEEE Energy Conversion Congress and Exposition (ECCE).* IEEE Press, s. 5968-5975 8 s.

Controlling current and voltage type interfaces in power-hardware-in-the-loop simulations
Dargahi, M., Ghosh, A., Davari, P. & Ledwich, G., okt. 2014, I: IET Power Electronics. 7, 10, s. 2618-2627 10 s.

Power converters design and analysis for high power piezoelectric ultrasonic transducers
Davari, P., Ghasemi, N. & Zare, F., aug. 2014, *Proceedings of the 16th Conference on Power Electronics and Applications, EPE'14-ECCE Europe.* IEEE Press, s. 1-9 9 s.

Sterilizing tissue-materials using pulsed power plasma
Tehrani, A. H., Davari, P., Singh, S. & Oloyede, A., apr. 2014, I: Journal of Materials Science: Materials in Medicine. 25, 4 , s. 953-964 12 s.

Analysing DBD plasma lamp intensity versus power consumption using a push-pull pulsed power supply
Davari, P., Zare, F. & Ghosh, A., 2013, *Proceedings of the 15th European Conference on Power Electronics and Applications (EPE 2013).* IEEE Press, 8 s.

Effect of pulsed power on particle matter in diesel engine exhaust using a DBD plasma reactor
Babaie, M., Davari, P., Zare, F., Rahman, M. M., Rahimzadeh, H., Ristovski, Z. & Brown, R., 2013, I: I E E E Transactions on Plasma Science. 41, 8, s. 2349-2358 10 s.

Parallel and series configurations of flyback converter for pulsed power applications
Davari, P., Zare, F. & Ghosh, A., 1 dec. 2012, *Proceedings of the 2012 7th IEEE Conference on Industrial Electronics and Applications, ICIEA 2012.* s. 1517-1522 6 s. 6360964

A flexible solid-state pulsed power topology
Davari, P., Zare, F. & Ghosh, A., 2012, *Power Electronics and Motion Control Conference (EPE/PEMC).*

High-Voltage Modular Power Supply Using Parallel and Series Configurations of Flyback Converter for Pulsed Power Applications
Davari, P., Zare, F., Ghosh, A. & Akiyama, H., 2012, I: IEEE Transactions on Plasma Science. 40, 10, s. 1-10 10 s.

Improving the efficiency of high power piezoelectric transducers for industrial applications
Davari, P., Ghasemi, N., Zare, F., O'Shea, P. & Ghosh, A., 2012, I: IET Science, Measurement & Technology. 6, 4, s. 213-221 9 s.

Parallel and Series Configurations of Flyback Converter for Pulsed Power Applications
Davari, P., Zare, F. & Ghosh, A., 2012, *IEEE/ICIEA.*

Power Electronic Converters for High Power Ultrasound Transducers
Ghasemi, N., Zare, F., Davari, P., Weber, P., Langton, C. & Ghosh, A., 2012, *IEEE/ICIEA.*

Designing a new robust on-line secondary path modeling technique for feedforward active noise control systems
Davari, P. & Hassanpour, H., jun. 2009, I: Signal Processing. 89, 6, s. 1195-1204 10 s.

An efficient online secondary path estimation for feedback active noise control systems
Hassanpour, H. & Davari, P., mar. 2009, I: Digital Signal Processing. 19, 2, s. 241-249 9 s.

A New Feedback ANC System Approach
Davari, P. & Hassanpour, H., mar. 2009, *Proceedings of 13th International CSI Computer Science.* Springer, Bind 6. s. 324-331 8 s. (Advances in Computer Science and Engineering).

A self-tuning feedforward active noise control system
Davari, P. & Hassanpour, H., mar. 2009, I: IEICE Electronics Express. 6, 5, s. 230-236 7 s.

A robust feedforward active noise control system with a variable step-size fxlms algorithm: Designing a new online secondary path modelling method
Davari, P. & Hassanpour, H., sep. 2008, I: International Journal of Engineering-Transactions A: Basics. 21, 3, s. 231-242 12 s.

An optimized online secondary path modeling method for single-channel feedback ANC systems
Davari, P. & Hassanpour, H., aug. 2008, I: International Journal of Engineering-Transactions A: Basics. 22, 1, s. 1 12 s.

A new fast and efficient HMM-based face recognition system using a 7-state HMM along with SVD coefficients
Miar Naimi, H. & Davari, P., apr. 2008, I: IRANIAN JOURNAL OF ELECTRICAL & ELECTRONIC ENGINEERING. 4, 1, s. 46-57 12 s.

A new online secondary path modelling method for feedforward active noise control systems
Davari, P. & Hassanpour, H., apr. 2008, *Proceedings of Industrial Technology, 2008. ICIT 2008. IEEE International Conference.* IEEE Press, s. 1-6 6 s.

A variable step-size FxLMS algorithm for feedforward active noise control systems based on a new online secondary path modelling technique
Davari, P. & Hassanpour, H., apr. 2008, *Proceedings of Computer Systems and Applications, 2008. AICCSA 2008. IEEE/ACS International Conference.* IEEE Press, s. 74-81 8 s.

A New Face Recognition System-Using HMMs Along with SVD Coefficients.
Davari, P. & Miar Naimi, H., 2008, *International Conference on Computer Vision Theory and Applications, VISAPP 2008.* s. 200-205 6 s.

Benefiting White Noise in Developing Feedforward Active Noise Control Systems
Davari, P. & Hassanpour, H., 2008, *Proceedings of Advances in Computer Science and Engineering.* Springer, s. 332-339 8 s.

Presseklip

CLEAN-POWER: NEW GRANT WITHIN POWER ELECTRONICS FROM INDEPENDENT RESEARCH FUND DENMARK (DFF)
Davari, P.
15/10/2021
1 Mediebidrag

Forskningsprojekt vil fjerne barriere for grøn omstilling af el-nettet
Davari, P.
02/05/2023 → 08/05/2023
3 elementer af Mediedækning

HOW ELECTROMAGNETIC COMPATIBILITY OF POWER ELECTRONIC SYSTEMS CONTRIBUTES TO "CLIMATE ACTION"
Davari, P.
14/09/2020
1 element af Mediedækning

Iranian classmates reunited in Queensland lab make medical breakthrough
Davari, P.
27/03/2014
1 element af Mediedækning

LOW HARM-projektet sætter fokus på strømforsyninger
Davari, P.
08/06/2020
1 element af Mediedækning

Postdoc grants from the Danish Council for Independent Research | Technology and Production Sciences, September 2015
Davari, P.
01/09/2015
1 Mediebidrag

AAU-talent modtager Danmarks ældste ingeniørpris
Davari, P.
28/03/2022
1 element af Mediedækning

Aktiviteter

Power Electronics for a Sustainable Society
Davari, P. (Foredragsholder)
9 maj 2022

SUSTAINABLE DIGITAL INFRASTRUCTURE ALLIANCE (SDIA) (Ekstern organisation)
Davari, P. (Medlem)
apr. 2021

IEEE EMC Society (Ekstern organisation)
Davari, P. (Forperson)
feb. 2021

Applied Sciences (Tidsskrift)
Davari, P. (Redaktør)
2021

Power Electronic Devices and Components (Tidsskrift)
Davari, P. (Redaktør)
2021

Power Electronics Ready for New Grid Requirements
Davari, P. (Foredragsholder)
2 nov. 2020

Circuit World (Tidsskrift)
Davari, P. (Redaktør)
sep. 2020

21st IEEE Workshop on Control and Modeling for Power Electronics, COMPEL 2020
Davari, P. (Arrangør)
2020

Magnetism (Tidsskrift)
Davari, P. (Redaktør)
2020

Journal of Power Electronics (Tidsskrift)
Davari, P. (Redaktør)
feb. 2019

Application of Power Electronics (Tidsskrift)
Blaabjerg, F. (Fagfællebedømmer), Dragicevic, T. (Fagfællebedømmer) & Davari, P. (Fagfællebedømmer)
2019 → …

Application of Power Electronics (Tidsskrift)
Blaabjerg, F. (Fagfællebedømmer), Dragicevic, T. (Fagfællebedømmer) & Davari, P. (Fagfællebedømmer)
2019 → …

Danish Standards (Ekstern organisation)
Davari, P. (Medlem)
2019

International Electrotechnical Commission (IEC) (Ekstern organisation)
Davari, P. (Medlem)
2019

Electronics Letters (Tidsskrift)
Davari, P. (Redaktør)
jun. 2018 → …

29th European Symposium on Reliability of Electron Devices, Failure Physics and Analysis
Davari, P. (Arrangør)
2018

Applied Sciences (Tidsskrift)
Davari, P. (Redaktør)
2018

Rectification Harmonics in Motor Drives: Modeling and Control
Davari, P. (Foredragsholder), Yang, Y. (Foredragsholder) & Zhou, D. (Foredragsholder)
29 okt. 2017

EMC Design of Drive Systems [Modeling, Prediction and Mitigation of Grid-Side 0-150 kHz Harmonic Emissions]
Davari, P. (Foredragsholder)
12 jun. 2017 → 13 jun. 2017

Strategies in Protecting Future Power Grids from Rectifier's Harmonic Emissions (0-150 kHz): Modelling, Prediction and Mitigation
Davari, P. (Foredragsholder)
3 maj 2017

EPE (Ekstern organisation)
Davari, P. (Medlem)
2017

42nd Conference of the Industrial Electronics Society, IECON 2016
Davari, P. (Deltager)
25 okt. 2016

International Journal of Power Electronics (Tidsskrift)
Davari, P. (Redaktør)
jul. 2016 → …

Seventh Annual IEEE Energy Conversion Congress & Exposition (ECCE 2015)
Davari, P. (Oplægsholder)
22 sep. 2015 → 30 sep. 2015

17th European Conference on Power Electronics and Applications, EPE-ECCE Europe 2015
Davari, P. (Oplægsholder)
8 sep. 2015 → 10 sep. 2015

HARMONY Symposium 2015
Davari, P. (Oplægsholder)
31 aug. 2015

Leading the Virtual Company – Pasteur Program 2015
Davari, P. (Deltager)
27 jan. 2015 → 16 nov. 2015

Internation Power Electronics and Motion Control Conference 2012 (EPE-PEMC 2012)
Davari, P. (Oplægsholder)
4 sep. 2012 → 6 sep. 2012

7th IEEE Conference on Industrial Electronics and Applications
Davari, P. (Oplægsholder)
18 jul. 2012 → 31 jul. 2012

Projekter

An Optimized Dual Active Bridge Converter for EV On-board Charger
Liu, B. (PI (principal investigator)), Davari, P. (Supervisor) & Blaabjerg, F. (Supervisor)

01/12/2017 → 01/12/2020

BioCat Roslev – Phase 1
Blaabjerg, F. (PI (principal investigator)) & Davari, P. (CoI (co-investigator))
EUDP
26/09/2018 → 31/08/2019

BMS-DC: Next Generation BMS Technology for Data Centers
Oshnoei, A. (PI (principal investigator)), Davari, P. (CoPI), Teodorescu, R. (CoPI) & Steffensen, B. (Projektkoordinator)
Energy Cluster Denmark
01/04/2024 → 31/12/2024

CAPeX: CAPeX - Pionercenter for Accelerating P2X Materials Discovery
Blaabjerg, F. (PI (principal investigator)), Jensen, S. H. (CoPI), Wang, H. (Projektdeltager), Davari, P. (Projektdeltager), Olguín Godoy, V. (Projektdeltager), Pedersen, K. (Projektdeltager), Bøgh, S. (Projektdeltager), Pérez Millan, A. (Projektdeltager), Vasudev, A. P. (Projektdeltager) & Frøstrup, S. (Projektkoordinator)
01/05/2023 → 30/04/2036

CLEAN-Power: Compatibility and Low electromagnetic Emission Advancements for Next generation Power electronic systems
Davari, P. (PI (principal investigator)), Xue, P. (Projektdeltager), Tang, Z. (Projektdeltager) & Frøstrup, S. (Projektkoordinator)
Danmarks Frie Forskningsfond
01/07/2022 → 30/06/2026

Deep learning based transformer fault diagnosis method via vibration signal
Li, C. (PI (principal investigator)) & Davari, P. (Supervisor)
12/11/2021 → 12/11/2022

Design and Control of Single-Phase WBG Based Grid Connected Inverter in Photovoltaic Applications
Liu, C. (PI (principal investigator)), Davari, P. (Supervisor) & Blaabjerg, F. (Supervisor)
01/02/2023 → 31/01/2026

LOW HARM : Effektelektronik klar til nye netharmoniske krav
Davari, P. (PI (principal investigator)) & Østergaard, J. (Projektkoordinator)
Innovationsnetværket Smart Energy (Inno-SE)
01/10/2019 → 30/09/2020

EMC-Power: ElectroMagnetic Compatibility design and modeling in three-phase Power converters
Davari, P. (PI (principal investigator)) & Blaabjerg, F. (Projektleder)
Schneider Electric
01/01/2021 → 30/04/2023

Electromagnetic Interference Analysis and Mitigation of Highly Integrated Power Electronics in Motor Drives
Babu, P. (PI (principal investigator)), Davari, P. (Supervisor), Blaabjerg, F. (Supervisor) & Peyghami, S. (Supervisor)
01/10/2023 → 30/09/2026

NextGen EMC Lab: EMI/EMC Research Infrastructure for Next Generation Power Electronics
Davari, P. (PI (principal investigator))
Fabrikant Mads Clausens Fond, Det Ingeniør- og Naturvidenskabelige Fakultet og AAU Energy, Anden privat finansiering
01/06/2022 → 31/12/2022

eSMR-MeOH: eSMR-MeOH: Biogas to MeOH by electric reforming
Blaabjerg, F. (PI (principal investigator)), Davari, P. (CoI (co-investigator)) & Yang, Y. (CoI (co-investigator))
EUDP
01/08/2019 → 31/10/2024

HiRED: High Quality and Robust Energy Conversion Systems for Distributed Network
Davari, P. (PI (principal investigator))
Australian Research Council (ARC)
16/11/2018 → 31/12/2022

Improvement of AC-DC multi-terminal microgrids' protection against short circuit
Zarei, S. F. (PI (principal investigator)), Davari, P. (Supervisor) & Blaabjerg, F. (Supervisor)
01/08/2017 → 01/03/2018

Improvement of Transient Power Sharing Performance in Parallel Converter System and Microgrids
Alhasheem, M. A. M. Z. Y. (PI (principal investigator)) & Davari, P. (Supervisor)
01/11/2016 → 01/12/2019

Integrated Design for Reliability of Motor Drives in High-Power High-Speed Machines
Ahooye Atashin, S. (PI (principal investigator)), Blaabjerg, F. (Supervisor), Peyghami, S. (Supervisor) & Davari, P. (Supervisor)
01/01/2024 → 31/12/2026

HIPO: Integrated High-speed Power Systems for Industry and Mobile Applications
Davari, P. (PI (principal investigator)), Peyghami, S. (Projektdeltager), Blaabjerg, F. (Projektleder) & Frøstrup, S. (Projektkoordinator)
European Commission
01/09/2022 → 31/08/2026

Minimization of microgrid voltages harmonic distortion using remaining capacity of power electronic based distributed energy resources
Adineh, B. (PI (principal investigator)), Davari, P. (Supervisor) & Blaabjerg, F. (Supervisor)
01/10/2019 → 31/07/2020

MEGA: Modular Efficient power Generation with Advanced fuel cell power converters
Davari, P. (PI (principal investigator)), Blaabjerg, F. (Projektdeltager), Sangwongwanich, A. (Projektdeltager) & Frøstrup, S. (Projektkoordinator)
EUDP
01/04/2023 → 31/03/2027

Multi-Physics of High Power Density Power Electronic Systems
Davari, P. (PI (principal investigator)) & Steffensen, B. (Projektkoordinator)
DFF-Individuelle postdocstipendier : DFF-1333-00034
01/03/2016 → 31/05/2018

SiC4GRID: Next generation modular sic-based advanced power electronics converters for enhanced renewables integration into the grid
Davari, P. (PI (principal investigator)), Blaabjerg, F. (Projektleder) & Frøstrup, S. (Projektkoordinator)
European Commission
01/10/2022 → 30/09/2026

NHTD: New Harmonic Reduction Techniques for Motor Drives
Blaabjerg, F. (PI (principal investigator)), Davari, P. (Projektdeltager), Yang, Y. (Projektdeltager) & Soltani, H. (Projektdeltager)
Højteknologifonden
01/05/2014 → 30/11/2017

Online Condition-Monitoring of Power Semiconductor Devices using Acoustic Time-frequency Spectral Signature
Davari, P. (PI (principal investigator)), Iannuzzo, F. (CoI (co-investigator)) & Kristensen, O. D. (Projektdeltager)
Department of Energy Technology

15/08/2017 → 14/04/2018

Optimal Designing and Construction of a New Multilevel Inverter with the Purpose of Improving the Operational Parameters
Orfi Yeganeh, M. S. (PI (principal investigator)) & Davari, P. (Supervisor)
01/11/2019 → 01/11/2020

Physics based High Level Digital Twin concept modelling for Power2X systems
Olguín Godoy, V. (PI (principal investigator)), Blaabjerg, F. (Supervisor) & Davari, P. (Supervisor)
01/10/2023 → 30/09/2026

PEMC: Power Electronics Software Tool for ElectroMagnetic Interference Pre-compliance
Davari, P. (PI (principal investigator)), Tang, Z. (Projektdeltager), Xue, P. (Projektdeltager), Yuan, J. (Projektdeltager), Wani, U. B. (Projektdeltager) & Frøstrup, S. (Projektkoordinator)
Innovationsfonden
01/01/2022 → 30/06/2023

Probabilistic Assessment and Robustness Analysis of Power Electronic Sub-System for Grid Applications
Gholami-Khesht, H. (PI (principal investigator)), Blaabjerg, F. (Supervisor), Davari, P. (Supervisor) & Wang, X. (Supervisor)
01/06/2019 → 31/05/2022

Pulsed Power Supply Reliability
Zhao, Z. (PI (principal investigator)), Davari, P. (Supervisor) & Blaabjerg, F. (Supervisor)
15/09/2019 → 15/09/2020

Pyroelectricty for Multiphysics Sensing and Energy Harvesting
Rezaniakolaei, A. (PI (principal investigator)), Davari, P. (CoI (co-investigator)) & Miltersen, A. H. (Projektkoordinator)
Aalborg University
01/05/2021 → 31/10/2021

Reliable Control of Power Electronic based Power Systems
Steinkohl, J. (PI (principal investigator)), Wang, X. (Supervisor), Davari, P. (Supervisor) & Blaabjerg, F. (Supervisor)
01/04/2018 → 07/07/2021

REPEPS: REliable Power Electronic based Power System
Blaabjerg, F. (PI (principal investigator)), Iannuzzo, F. (CoI (co-investigator)), Davari, P. (CoI (co-investigator)), Wang, H. (CoI (co-investigator)), Wang, X. (CoI (co-investigator)) & Yang, Y. (CoI (co-investigator))
01/08/2017 → 01/12/2023

SOLARIS: SOLARIS
Peyghami, S. (PI (principal investigator)), Davari, P. (CoI (co-investigator)) & Frøstrup, S. (Projektkoordinator)
Horizon Europe
01/07/2024 → 30/06/2028

Stable-Drives: Stability enhancement methodologies for slim dc-link Drives
Davari, P. (PI (principal investigator)) & Blaabjerg, F. (Projektleder)
01/12/2020 → 15/03/2021

STUDY OF SPECTRAL CHARACTERISTICS OF LOW FREQUENCY CONDUCTED EMI IN POWER ELECTRONIC BASED SYSTEMS
Esfetanaj, N. N. (PI (principal investigator)), Wang, H. (Supervisor) & Davari, P. (Supervisor)
01/07/2018 → 10/06/2021

Supra-EMC: Supraharmonics ElectroMagnetic Compatibility strategies in power electronic based power grid
Davari, P. (PI (principal investigator)), Blaabjerg, F. (CoPI), Wang, H. (Projektdeltager) & Frøstrup, S. (Projektkoordinator)
Innovationsfonden
01/05/2023 → 31/10/2027

Synchronization Stability of Grid-Connected Converters under Grid Faults
Taul, M. G. (PI (principal investigator)), Blaabjerg, F. (Supervisor), Wang, X. (Supervisor) & Davari, P. (Supervisor)
01/09/2017 → 11/08/2020

Topology Derivation and Mission Profile Based Modeling of Bridgeless PFC Converters
Chen, Z. (PI (principal investigator)), Davari, P. (Supervisor) & Wang, H. (Supervisor)
01/02/2018 → 19/02/2021

Topology Optimization for High Efficiency Wide Band Gap Ground Power Unit
Blaabjerg, F. (PI (principal investigator)), Nielsen, A. B. (Projektdeltager) & Davari, P. (Projektleder)
Innovationsfonden
01/05/2018 → 30/04/2021

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