

# PUBLICATIONS

## 1. Refereed Published Journal Papers

### SUMMARY OF JOURNAL PUBLICATIONS

Abbreviation	Journal Title
IEEE Trans. Power Electron.	IEEE Transactions on Power Electronics
IEEE Trans. Ind. Electron.	IEEE Transactions on Industrial Electronics
IEEE J. Emerg. Sel. Topics Power Electron.	IEEE Journal of Emerging and Selected Topics in Power Electronics
IEEE J. Emerg. Sel. Topics Ind. Electron.,	IEEE Journal of Emerging and Selected Topics in Industrial Electronics
IEEE Trans. Sustain. Energy	IEEE Transactions on Sustainable Energy
IEEE Trans. Smart Grid	IEEE Transactions on Smart Grid
IEEE Trans. Ind. Appl.	IEEE Transactions on Industry Applications
IEEE J. Photovolt.	IEEE Journal of Photovoltaics
IEEE Trans. Energy Convers.	IEEE Transactions on Energy Conversion
Energies	Energies
Can. J. Elect. Comput. Eng.	Canadian Journal of Electrical and Computer Engineering
Int. T. Electr. Energy	International Transactions on Electrical Energy Systems
CPSS Trans. Power Electron. & Appl.	CPSS Transactions on Power Electronics and Applications

- [J1] H. Chung, **N. Ho**, W. Yan, P. W. Tam and R. Hui, “Comparison of dimmable electromagnetic and electronic ballast systems – an assessment on energy efficiency and lifetime”, *IEEE Trans. Ind. Electron.*, Vol. 54, No. 6, pp. 3145-3154, Dec. 2007.
- [J2] **C. Ho**, H. Chung and K. Au, “Design and implementation of a fast dynamic control scheme for capacitor-supported dynamic voltage restorers”, *IEEE Trans. Power Electron.*, Vol. 23, No. 1, pp. 237 – 251, Jan. 2008.
- [J3] W. Yan, **C. Ho**, H. Chung, and K. Au, “Fixed-frequency boundary control of buck converters with second-order switching surface”, *IEEE Trans. Power Electron.*, Vol. 24, No. 9, pp. 2193 – 2201, Sept. 2009.
- [J4] **C. Ho**, V. Cheung and H. Chung, “Constant-frequency hysteresis current control of grid-connected VSI without bandwidth control”, *IEEE Trans. Power Electron.*, Vol. 24, No. 11, pp. 2484 – 2495, Nov. 2009.
- [J5] **C. Ho**, and H. Chung, “Implementation and performance evaluation of a fast dynamic control scheme for capacitor-supported interline DVR”, *IEEE Trans. Power Electron.*, Vol. 25, No. 8, pp. 1975 – 1988, Aug. 2010.
- [J6] L. Wang, **C. Ho**, F. Canales, and J. Jatskevich, “High-frequency modeling of the long-cable-fed induction motor drive system using TLM approach for predicting overvoltage transients”, *IEEE Trans. Power Electron.*, Vol. 25, No. 10, pp. 2653 – 2664, Oct. 2010.
- [J7] **C. Ho**, H. Breuninger, S. Pettersson, G. Escobar, L. Serpa, and A. Coccia, “Practical design and implementation procedure of an interleaved boost converter using SiC diodes for PV applications”, *IEEE Trans. Power Electron.*, Vol. 27, No. 6, pp. 2835 – 2845, Jun. 2012.
- [J8] **C. Ho**, H. Breuninger, S. Pettersson, G. Escobar and F. Canales, "A comparative performance study of an interleaved boost converter using commercial Si and SiC diodes for PV applications", *IEEE Trans. Power Electron.*, Vol. 28, No. 1, pp. 289 – 299, Jan. 2013.
- [J9] Y. Yang, J. Ma, **C. Ho**, and Q. Zou, “A novel coupled inductor structure for Interleaving Bidirectional DC-DC converters”, *IEEE J. Emerg. Sel. Topics Power Electron.*, Vol. 3, No. 3, pp. 841 – 849, Sept. 2015.

- [J10] Y. He, H. Chung, **C. Ho**, and W. Wu, “Use of boundary control with second-order switching surface to reduce the system order for deadbeat controller in grid-connected inverter”, *IEEE Trans. Power Electron.*, Vol. 31, No. 3, pp. 2638 – 2653, Mar. 2016.
- [J11] R. Li, and **C. Ho**, “An Active Snubber Cell for N-Phase Interleaved DC-DC Converters”, *IEEE J. Emerg. Sel. Topics Power Electron.*, Vol. 4, No. 2, pp. 334 – 351, Jun. 2016.
- [J12] Y. He, H. Chung, **C. Ho**, and W. Wu, “Direct Current Tracking Using Boundary Control with Second-Order Switching Surface for Three-Phase Three-Wire Grid-Connected Inverter”, *IEEE Trans. Power Electron.*, vol. 32, no. 7, pp. 5723-5740, Jul. 2017.
- [J13] **C. Ho**, R. Li, and K. Siu, “Active Virtual Ground - Bridgeless PFC Topology,” *IEEE Trans. Power Electron.*, vol. 32, no. 8, pp. 6206 - 6218, Aug. 2017.
- [J14] G. Escobar, S. Pettersson, **C. Ho**, and R. Rico-Camacho, “Multi-sampling maximum power point tracker (MS-MPPT) to compensate irradiation and temperature changes”, *IEEE Trans. Sustainable Energy*, vol. 8 no. 3, pp. 1096 - 1105, Aug. 2017.
- [J15] Y. He, H. Chung, **C. Ho**, and W. Wu, “Modified Cascaded Boundary-Deadbeat Control for a Virtually-Grounded Three-Phase Grid-Connected Inverter with LCL Filter”, *IEEE Trans. Power Electron.*, vol. 32, no. 10, pp. 1941-0107, Oct. 2017.
- [J16] D. Li, **C. Ho**, L. Liu, and G. Escobar, “Reactive Power Control for Single-phase Grid-tie Inverters using Quasi Sinusoidal Waveform,” *IEEE Trans. Sustainable Energy*, vol. 9, no. 1, pp. 3-11, Jan. 2018.
- [J17] G. Escobar, P.R. Martinez-Rodriguez, **C. Ho**, J.M. Sosa, and M.J. Lopez-Sanchez, “Design of a current reference for an inverter-side current controller of a single-phase LCL-based grid-connected inverter”, *Int. T. Electr. Energy*, vol. 28, no. 1, e2476, Jan. 2018.
- [J18] R. Li, **C. Ho**, and C. Xu “Active Virtual Ground - Single Phase Transformerless Grid-Connected Voltage Source Inverter Topology,” *IEEE Trans. Power Electron.*, vol. 33, no. 2, pp. 1335 - 1346, Feb. 2018. **(Second Place Winner Prize Paper Awards)**
- [J19] M. Pokharel, N. Hildebrandt, **C. Ho**, and Y. He, “A Fast Dynamic Unipolar Switching Control Scheme for Single Phase Inverters in DC Microgrids,” *IEEE Trans. Power Electron.*, vol. 34, no. 1, pp. 916 - 927, Jan. 2019.
- [J20] M. Pokharel, A. Ghosh, and **C. Ho**, “Small-Signal Modelling and Design Validation of PV-Controllers with INC-MPPT using CHIL”, *IEEE Trans. Energy Convers.*, vol. 34, no. 1, pp. 316 - 317, Mar. 2019.
- [J21] K. Siu, Y. He, **C. Ho**, H. Chung, and R. Li, “Advanced Digital Controller for Improving Input Current Quality of Integrated Active Virtual Ground-Bridgeless PFC”, *IEEE Trans. Power Electron.*, vol. 34, no. 4, pp. 3921 - 3936, Apr. 2019.
- [J22] **C. Ho**, and K. Siu, “Manitoba Inverter – Single Phase Single-Stage Buck-Boost VSI Topology”, *IEEE Trans. Power Electron.*, vol. 34, no. 4, pp. 3445 - 3456, Apr. 2019.
- [J23] Y. Zhou, **C. Ho**, and K. Siu, “A Fast MPPT Control Technique using Boundary Controller for PV Applications”, *IEEE J. Photovolt.*, vol. 9, no. 3, pp. 849-857, May 2019.
- [J24] R. Abdalaal, **C. Ho**, C. Leung, and H. Chung, “A Remotely Central Dimming System for a Large-Scale LED Lighting Network Providing High Quality Voltage and Current,” *IEEE Trans. Ind. Appl.*, vol. 55, no. 5, pp. 5455-5465, Sept.-Oct. 2019.
- [J25] D. Li, **C. Ho**, and K. Siu, “A Method for Solving Current Unbalance Problem of Paralleled Single-Phase Grid-connected Unipolar-PWM Inverters with Common DC Bus”, *IEEE Trans. Ind. Appl.*, vol. 55, no. 6, pp. 7595-7603, Nov.-Dec. 2019.
- [J26] K. Siu, and **C. Ho**, “Manitoba Rectifier - Bridgeless Buck-Boost PFC”, *IEEE Trans. Power Electron.*, vol. 35, no. 1, pp. 403 - 414, Jan. 2020.
- [J27] K. Siu, **C. Ho**, and R. Li, “A Four-Quadrant Single-Phase Grid-Connected Converter with only Two High Frequency Switches”, *IEEE Trans. Ind. Electron.*, vol. 67, no. 3, pp. 1899-1909, Mar. 2020.

- [J28] Y. Xu, **C. Ho**, A. Ghosh, and D. Muthumuni “An Electrical Transient Model of IGBT-Diode Switching Cell for Power Semiconductor Loss Estimation in Electromagnetic Transient Simulation”, *IEEE Trans. Power Electron.*, vol. 35, no. 3, pp. 2979-2989, Mar. 2020.
- [J29] D. Li, and **C. Ho**, “A Delay-Tolerable Master-Slave Current-Sharing Control Scheme for Parallel-Operated Interfacing Inverters with Low-Bandwidth Communication”, *IEEE Trans. Ind. Appl.*, vol. 56, no. 2, pp. 1575-1586, March-April 2020.
- [J30] R. Abdalaal, and **C. Ho**, “Characterization of Commercial LED Lamps for Power Quality Studies,” *Can. J. Elect. Comput. Eng.*, vol. 44, no. 2, pp. 94-104, Spring 2021.
- [J31] K. Siu, and **C. Ho**, “System Model and Performance Evaluation of Single-Stage Buck-Boost Type Manitoba Inverter for PV Applications”, *IEEE J. Emerg. Sel. Topics Power Electron.*, vol. 8, no. 4, pp. 3457-3466, Dec. 2020.
- [J32] I. Jayawardana, **C. Ho**, and Y. He, “Boundary Control with Corrected Second-order Switching Surface for Buck Converters Connected to Capacitive Loads”, *IEEE J. Emerg. Sel. Topics Power Electron.*, vol. 9, no. 1, pp. 183-196, Feb. 2021.
- [J33] M. Pokharel, and **C. Ho**, “Stability Analysis of Power Hardware in the Loop (PHIL) Architecture with Solar Inverter”, *IEEE Trans. Ind. Electron.*, vol. 68, no. 5, pp. 4309-4319, May 2021.
- [J34] D. Li, and **C. Ho**, “A Module-Based Plug-n-Play Dc Microgrid with Fully Decentralized Control for IEEE Empower a Billion Lives Competition”, *IEEE Trans. Power Electron.*, vol. 36, no. 2, pp. 1764-1776, Feb. 2021.
- [J35] K. Siu, **C. Ho**, and D. Li, “Design and Analysis of a Bidirectional Hybrid Dc Circuit Breaker using Ac Relays with Long Life Time”, *IEEE Trans. Power Electron.*, vol. 36, no. 3, pp. 2889-2900, March 2021.
- [J36] K. Siu, and **C. Ho**, “Generalized Design Approach of a Family of Grid-connected Converters Based on Active Virtual Ground Technique for Single-phase Ac Microgrid Applications”, *CPSS Trans. Power Electron. & Appl.*, vol. 5, no. 3, pp. 203-212, Sept. 2020.
- [J37] A. Ghosh, **C. Ho**, J. Prendergast, and Y. Xu, “Conceptual Design and Demonstration of an Automatic System for Extracting Switching Loss and Creating Data Library of Power Semiconductors”, *IEEE OJ of Power Electron.*, vol. 1, pp. 431-444, 2020.
- [J38] D. Li, and **C. Ho**, “Decentralized PV-BES Coordination Control with Improved Dynamic Performance for Islanded Plug-n-Play Dc Microgrid”, *IEEE J. Emerg. Sel. Topics Power Electron.*, vol. 9, no. 4, pp. 4992-5001, Aug. 2021.
- [J39] I. Jayawardana, **C. Ho**, M. Pokharel, and G. Escobar, “A Fast-Dynamic Control Scheme for a Power-Electronics-Based PV Emulator,” *IEEE J. Photovolt.*, vol. 11, no. 2, pp. 485-495, March 2021.
- [J40] R. Abdalaal, and **C. Ho**, “Analysis and Validations of Modularized Distributed TL-UPQC systems with Supervisory Remote Management System”, *IEEE Trans. Smart Grid.*, , vol. 12, no. 3, pp. 2638-2651, May 2021.
- [J41] Y. Xu, **C. Ho**, A. Ghosh, and D. Muthumuni “Design, Implementation and Validation of Electro-Thermal Simulation for SiC MOSFETs in Power Electronic Systems”, *IEEE Trans. Ind. Appl.*, vol. 57, no. 3, pp. 2714-2725, May-June 2021.
- [J42] Y. Xu, **C. Ho**, A. Ghosh, and D. Muthumuni “Generalized Behavioral Modeling Methodology of Switch-Diode Cell for Power Loss Prediction in Electromagnetic Transient Simulation”, *Energies*. 2021; 14(5):1500. **(Invited Paper)**
- [J43] R. Abdalaal, and **C. Ho**, “System Modeling and Stability Analysis of Single-Phase Transformerless UPQC Integrated Input Grid Voltage Regulation”, *IEEE J. Emerg. Sel. Topics Ind. Electron.*, vol. 3, no. 3, pp. 670-682, July 2022.
- [J44] I. Jayawardana, **C. Ho**, and Y Zhang, “A Comprehensive Study and Validation of a Power-HIL Testbed for Evaluating Grid-Connected EV Chargers”, *IEEE J. Emerg. Sel. Topics Power Electron.*, vol. 10, no. 2, pp. 2395-2410, April 2022.

- [J45] M. Pokharel, and **C. Ho**, “Development of Interface Model and Design of Compensator to Overcome Delay Response in a PHIL Setup for Evaluating a Grid-Connected Power Electronic DUT”, *IEEE Trans. Ind. Appl.*, vol. 58, no. 3, pp. 4109-4121, May-June 2022.
- [J46] J. Dadkhah, **C. Ho**, K. Siu and R. Li, “Magnetic Components Reduction in Three-phase PFC Converter by Using Reconfigurable LCL Filter”, *IEEE Trans. Power Electron.*, vol. 37, no. 12, pp. 14926-14943, Dec. 2022.
- [J47] J. Dadkhah, **C. Ho**, Y. Xu and J. Liu, “Comprehensive study and performance evaluation of an interleaved GaN-based PFC with magnetic component size reduction”, *IEEE Trans. Ind. Electron.*, 2024. **(Early Access)**
- [J48] J. Dadkhah, **C. Ho**, and K. Siu, “Three-phase Transformerless PV Inverter with Reconfigurable LCL Filter and Reactive Power Capability”, *IEEE Trans. Power Electron.*, 2024. **(Early Access)**
- [J49] S. Jayamaha, **C. Ho**, and A. Rajapakse, “Parallel/Series Connected Standardized Active Switching Modules for High Power DCCBs in MVDC Networks”, *IEEE Trans. Power Electron.*, 2024. **(Early Access)**

## 2. Refereed Published Conference Papers

SUMMARY OF CONFERENCE PUBLICATIONS

Conference	Conference full title	IEEE Society
APEC	IEEE The Applied Power Electronics Conference and Exposition	Power Electronics
PESC	IEEE Power Electronics Specialists Conference	Power Electronics
ECCE	IEEE Energy Conversion Congress & Expo	Power Electronics
EPE	IEEE Energy Conversion Congress & Expo – Europe	Power Electronics
ECCE-Asia	IEEE Energy Conversion Congress & Expo – ASIA	Power Electronics
PEAC	IEEE International Power Electronics and Application Conference and Exposition	Power Electronics
CIEP	IEEE International Power Electronics Congress	Power Electronics
COMPEL	IEEE Workshop on Control and Modeling for Power Electronics	Power Electronics
IECON	The Annual Conference of the IEEE Industrial Electronics Society	Industrial Electronics
IAS	Industry Applications Society Annual Meeting	Industry Applications
EPEC	IEEE Canada Electrical Power and Energy Conference	IEEE Canada
WoW	IEEE PELS Workshop on Emerging Technologies: Wireless Power	Power Electronics
WPTC	IEEE MTT-S Wireless Power Transfer Conference	IEEE Canada
APSCOM	IET International Conference on Advances in Power System Control, Operation and Management	IET

- [C1] H. Chung, **N. Ho**, R. Hui and W.Z. Mai, “Case study of a highly-reliable dimmable road lighting system with intelligent remote control”, *EPE05*, Sept. 2005.
- [C2] **C. Ho**, H. Chung and K. Leung “Fast dynamic control of PFC using boundary control with a second-order switching surface”, *IEEE PESC06*, Jun. 2006.
- [C3] **C. Ho** and H. Chung “Fast transient control of single-phase dynamic voltage restorer (DVR) without external DC source”, *IEEE PESC06*, Jun. 2006.
- [C4] **C. Ho** and H. Chung “Fast transient control for three-phase capacitor -supported dynamic voltage restorer (DVR)”, *IEEE APEC07*, Feb. 2007.
- [C5] **C. Ho** and H. Chung “Fast dynamic control scheme for capacitor -supported dynamic voltage restorers: design issues, implementation and analysis”, *IEEE PESC07*, Jun. 2007.

- [C6] **C. Ho**, K. Au and H. Chung “Strategy for current harmonic reduction of PFC with boundary control using second-order switching surface”, *IEEE PESC07*, Jun. 2007.
- [C7] K. Au, **C. Ho**, H. Chung, W.H. Lau and W.T. Yan “Digital implementation of boundary control with second-order switching surface for inverters”, *IEEE PESC07*, Jun. 2007.
- [C8] W. Yan, H. Chung, K. Au and **C. Ho** “Fixed-frequency boundary control of buck converters with second-order switching surface”, *IEEE PESC08*, Jun. 2008.
- [C9] **C. Ho**, F. Canales, A. Coccia, and M. Laitinen, “A circuit-level analytical study on switching behaviors of SiC diodes at basic cell for power converters,” *IEEE IAS08*, Oct. 2008.
- [C10] **C. Ho**, V. Cheung and H. Chung, “Constant-frequency hysteresis current control of grid-connected VSI without bandwidth control”, *IEEE ECCE09*, Sept. 2009.
- [C11] L. Wang, **C. Ho**, F. Canales and J. Jatskevich, “High-frequency cable and motor modeling of long-cable-fed induction motor drive systems”, *IEEE ECCE10*, Sept. 2010.
- [C12] A. Timbus, A. Oudalov and **C. Ho**, “Islanding detection in smart grids”, *IEEE ECCE10*, Sept. 2010.
- [C13] **C. Ho**, H. Breuninger, S. Pettersson, G. Escobar, L. Serpa, and A. Coccia, "Practical implementation of an interleaved boost converter using SiC diodes for PV applications", *IEEE ECCE-Asia, ICPE11*, Jun. 2011.
- [C14] **C. Ho**, H. Breuninger, S. Pettersson, G. Escobar and F. Canales, "A comparative performance study of an interleaved boost converter using commercialized Si and SiC diodes for PV applications", *IEEE ECCE-Asia, ICPE11*, Jun. 2011.
- [C15] **C. Ho**, F. Canales, S. Pettersson, G. Escobar, and A. Coccia, “Performance evaluation of full SiC switching cell in an interleaved boost converter for PV applications”, *IEEE ECCE11*, Sept. 2011.
- [C16] G. Escobar, S. Pettersson, **C. Ho**, M. Karppanen, and T. Pulli, “PV current sensorless MPPT for a single-phase PV inverter,” *IEEE IECON11*, Nov. 2011.
- [C17] G. Escobar, S. Pettersson, and **C. Ho**, “Phase-locked loop for grid synchronization under unbalanced operation and harmonic distortion,” *IEEE IECON11*, Nov. 2011.
- [C18] G. Escobar, S. Pettersson, and **C. Ho**, “Maximum power point searching method for partial shaded PV strings,” *IEEE IECON12*, Oct. 2012.
- [C19] G. Escobar, **C. Ho**, S. Pettersson, “Control of single-phase inverter connected to the grid through an LCL filter,” *IEEE IECON12*, Oct. 2012.
- [C20] **C. Ho**, “Challenges and design considerations of PV inverters in the future Smart Grids,” *IET APSCOM12*, Nov. 2012.
- [C21] G. Escobar, **C. Ho**, S. Pettersson, “Multi-sampling maximum power point tracker (MS-MPPT) to compensate irradiation and temperature changes,” *IEEE IECON14*, Oct. 2014.
- [C22] G. Escobar, **C. Ho**, S. Pettersson, “Cascade three-phase PLL for unbalance and harmonic distortion operation (CSRF-PLL),” *IEEE IECON14*, Oct. 2014.
- [C23] G. Escobar, **C. Ho**, S. Pettersson, “Discrete phase-locked loop for three-phase systems,” *IEEE IECON14*, Oct. 2014.
- [C24] R. Li, and **C. Ho**, “An Active Snubber Circuit Cell for N-Phase Interleaved DC-DC Converters,” *IEEE PEAC*, Nov. 2014.
- [C25] **C. Ho**, R. Li, and E. Bianda, “An Efficient Current-Source Power Bipolar Junction Transistor Driver,” *IEEE PEAC*, Nov. 2014.
- [C26] Y. Tong, Z. Shan, **C. Ho**, J. Jatskevich, “Concept of Synthesizing Modular Power Supply for Interfacing Diverse Energy Sources and Loads,” *IEEE COMPEL 2015*, Jul. 2015
- [C27] G. Escobar, S. Pettersson, **C. Ho**, M. Lopez-Sanchez, J. Sosa, and P. Martinez-Rodriguez, “Current control of a three-phase inverter grid connected through a LCL filter,” *IEEE IECON15*, Nov. 2015.

- [C28] R. Li, and C. Ho, "Active Virtual Ground: Single Phase Grid-Connected Voltage Source Inverter Topology," *IEEE APEC16*, Mar. 2016.
- [C29] Y. Zhou, and C. Ho, "A Review on Microgrid Architectures and Control Methods," *IEEE ECCE-Asia 16*, May 2016.
- [C30] G. Escobar, C. Ho, and S. Pettersson, "A combined method for anti-islanding in PV inverters," *IEEE CIEP16*, Jun. 2016.
- [C31] C. Ho, R. Li, and K. Siu, "Active Virtual Ground - Bridgeless PFC Topology," *IEEE ECCE16*, Sept. 2016.
- [C32] N. Hildebrandt, M. Pokharel, C. Ho, and Y. He, "A Fast Dynamic Unipolar Switching Control Scheme for Single Phase Inverters in DC Microgrids," *IEEE ECCE16*, Sept. 2016.
- [C33] Y. He, H. Chung, C. Ho, W. Wu, "DC Bus Splitting Voltage Feedforward Injection Method for a Virtually-Grounded Three-Phase Inverter," *IEEE ECCE16*, Sept. 2016.
- [C34] Y. He, H. Chung, C. Ho, W. Wu, "Current-Mode Boundary Controller with Reduced Number of Current Sensors for a Three-Phase Inverter with an LCL-Filter," *IEEE ECCE16*, Sept. 2016.
- [C35] D. Li, C. Ho, L. Liu, and G. Escobar, "Reactive Power Control for Single-phase Grid-tie Inverters using Quasi Sinusoidal Waveform," *IEEE IECON16*, Nov. 2016.
- [C36] K. Siu, and C. Ho, "A Critical Review of Bridgeless Power Factor Correction (PFC) Boost Rectifiers with Common-mode Voltage Mitigation," *IEEE IECON16*, Nov. 2016.
- [C37] K. Siu, Y. He, C. Ho, H. Chung, and R. Li, "Design, Implementation and Analysis of an Advanced Digital Controller for Active Virtual Ground-Bridgeless PFC," *IEEE APEC17*, Mar. 2017.
- [C38] Y. Zhou, C. Ho, and K. Siu, "A Fast and Accurate MPPT Control Scheme for PV Applications," *IEEE APEC17*, Mar. 2017.
- [C39] C. Ho and K. Siu, "Manitoba Inverter - Single Phase Single-Stage Buck-Boost VSI Topology," *IEEE ECCE17*, Oct. 2017.
- [C40] K. Siu and C. Ho, "Manitoba Rectifier - Bridgeless Buck-Boost PFC," *IEEE ECCE17*, Oct. 2017. **(3rd Prize in the Student Project Demonstration on Emerging Technology)**
- [C41] I. Jayawardana, C. Ho, M. Pokharel, and G. Escobar, "A Fast Dynamic Photovoltaic Simulator with Instantaneous Output Impedance Matching Controller," *IEEE ECCE17*, Oct. 2017.
- [C42] D. Li, C. Ho and K. Siu, "A Current Sharing Technique for Parallel-Operated Unipolar-PWM Inverters," *IEEE ECCE17*, Oct. 2017.
- [C43] R. Abdalaal and C. Ho, "Characterization of Commercial LED Lamps for Power Quality Studies," *IEEE EPEC17*, Oct. 2017.
- [C44] O. Mateo, A. Gole, and C. Ho, "Design and Implementation of Laboratory Scale Static Var Compensator to Demonstrate Dynamic Load Balancing and Power Factor Correction," *IEEE EPEC17*, Oct. 2017.
- [C45] C. Ho, R. Andico, and G. Mudiyanselage, "Solar Photovoltaic Power in Manitoba," *IEEE EPEC17*, Oct. 2017.
- [C46] R. Abdalaal and C. Ho, "Transformerless Single-Phase UPQC for Large Scale LED Lighting Networks," *IEEE IECON17*, Nov. 2017.
- [C47] M. Pokharel and C. Ho, "Stability Study of Power Hardware in the Loop (PHIL) with a Real PV Inverter," *IEEE IECON17*, Nov. 2017.
- [C48] K. Siu, C. Ho, D. Li, and R. Li, "A Four-Quadrant Active Virtual Ground Rectifier by using only two High Frequency Switches," *IEEE IECON17*, Nov. 2017.
- [C49] Y. Xu, C. Ho, A. Ghosh, and D. Muthumuni "A Behavioral Transient Model of IGBT Module for Switching Cell Power Loss Estimation in Electromagnetic Transient Simulation", *IEEE APEC18*, Mar. 2018.
- [C50] R. Shen, W. Xiao, B. Zhang, D. Qiu, and C. Ho, "Load Detection Method and Control of Class-E Inverter for Dynamic Wireless Power Transfer", *IEEE WoW18*, Jun. 2018.

- [C51] J. Luo, W. Xiao, B. Zhang, D. Qiu, and C. Ho, "Design of Magnetic Coupling Resonant Wireless Charging System for Cable Tunnel Inspection Robot", *IEEE MTT-S WPTC2018*, Jun. 2018
- [C52] D. Li, and C. Ho, "Master-Slave Control of Parallel-Operated Interfacing Inverters Based on Digital Wireless Communication", *IEEE ECCE18*, Sept. 2018.
- [C53] K. Siu, and C. Ho, "Small-Signal Modelling and Stability Study of a Single Stage Buck-Boost Inverter for PV Application", *IEEE ECCE18*, Sept. 2018.
- [C54] R. Abdalaal, and C. Ho, "A Remotely Control Dimming System for LED lamps with Power Factor Correction", *IEEE ECCE18*, Sept. 2018.
- [C55] J. Hu, W. Xiao, D. Qiu, B. Zhang and C. Ho, "A Single Phase Hybrid Interleaved Parallel Boost PFC Converter", *IEEE ECCE18*, Sept. 2018.
- [C56] J. Hu, W. Xiao, D. Qiu, B. Zhang and C. Ho, "Low CM leakage Current and High Efficiency H6 Inverter with Active Clamping for Transformerless PV System", *IEEE IECON18*, Nov. 2018.
- [C57] K. Siu, and C. Ho, "Operation of Combined HF and LF Boost Inductors in PFC", *IEEE PEAC18*, Nov. 2018.
- [C58] H. Li, A. Gole, and C. Ho, "Controller Implementation and Performance Evaluation of a High Power Three-Phase Active Power Filter using Controller Hardware-in-the-Loop Simulation," *IEEE EPEC18*, Oct. 2018.
- [C59] Y. Xu, C. Ho, A. Ghosh, and D. Muthumuni "A Datasheet-Based Behavioral Model of SiC MOSFET for Power Loss Prediction in Electromagnetic Transient Simulation", *IEEE APEC19*, Mar. 2019.
- [C60] K. Siu, and C. Ho, "Transformerless Grid-connected Converters using Active Virtual Ground Technique for Single-phase Microgrids", *IEEE SEGE19*, Aug. 2019. **(Best Paper Award)**
- [C61] I. Jayawardana, C. Ho, and M. Pokharel, "Design and Implementation of Switch-mode Solar Photovoltaic Emulator using Power-Hardware-in-the-loop Simulations for Grid Integration Studies", *IEEE ECCE19*, Sept. 2019.
- [C62] Z. Zhang, C. Ho, and W. Xiao "A FPGA-based Switch-mode Power Amplifier using Boundary Controller to achieve High System Bandwidth", *IEEE ECCE19*, Sept. 2019.
- [C63] H. Umar-Lawal, C. Ho, and K. Siu, "An Isolated Single-Stage Micro-Inverter Topology with Integrated Magnetic Components", *IEEE ECCE19*, Sept. 2019.
- [C64] A. Ghosh, C. Ho, and J. Prendergast, "A Cost-effective, Compact, Automatic Testing System for Dynamic Characterization of Power Semiconductor Devices", *IEEE ECCE19*, Sept. 2019.
- [C65] R. Abdalaal, C. Ho, "A Supervisory Remote Management System for Parallel Operation of Modularized D-STATCOM", *IEEE APEC20*, Mar. 2020.
- [C66] M. Pokharel, and C. Ho, "Modelling and Experimental Evaluation of Ideal Transformer Algorithm Interface for Power Hardware in the Loop Architecture", *IEEE APEC20*, Mar. 2020.
- [C67] D. Li, C. Ho, K. Siu, and M. Pokharel, "A Module-Based Hierarchical Microgrid with a Bottom-Up Building Approach for Rural Electrification", *IEEE APEC20*, Mar. 2020.
- [C68] K. Siu, and C. Ho, "Reactive Power Modulation Strategy of a Single-stage Buck-boost-type Inverter", *IEEE ECCE20*, Oct. 2020.
- [C69] A. Ghosh, C. Ho, and K. Siu, "A Manitoba Converter based Bi-directional On-board charger for Plug-in Electric Vehicles", *IEEE ECCE20*, Oct. 2020.
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