

Carl N M Ho

List of Publications by Year in descending order

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84
papers

1,530
citations

331670

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all docs

84
docs citations

84
times ranked

1346
citing authors

#	ARTICLE	IF	CITATIONS
1	A Comprehensive Study and Validation of a Power-HIL Testbed for Evaluating Grid-Connected EV Chargers. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2022, 10, 2395-2410.	5.4	15
2	System Modeling and Stability Analysis of Single-Phase Transformerless UPQC Integrated Input Grid Voltage Regulation. IEEE Journal of Emerging and Selected Topics in Industrial Electronics, 2022, 3, 670-682.	3.9	14
3	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 Transactions on Industry Applications, 2022, 58, 4109-4121.	4.9	6
4	Magnetic Components Reduction in a Three-Phase PFC Converter by Using a Reconfigurable LCL Filter. IEEE Transactions on Power Electronics, 2022, 37, 14926-14943.	7.9	2
5	Boundary Control With Corrected Second-Order Switching Surface for Buck Converters Connected to Capacitive Loads. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2021, 9, 183-196.	5.4	5
6	A Module-Based Plug-n-Play DC Microgrid With Fully Decentralized Control for IEEE Empower a Billion Lives Competition. IEEE Transactions on Power Electronics, 2021, 36, 1764-1776.	7.9	27
7	Design and Analysis of a Bidirectional Hybrid DC Circuit Breaker Using AC Relays With Long Life Time. IEEE Transactions on Power Electronics, 2021, 36, 2889-2900.	7.9	9
8	Decentralized PV-BES Coordination Control With Improved Dynamic Performance for Islanded Plug-n-Play DC Microgrid. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2021, 9, 4992-5001.	5.4	11
9	Characterization of Commercial LED Lamps for Power Quality Studies. Canadian Journal of Electrical and Computer Engineering, 2021, 44, 94-104.	2.0	5
10	A Fast-Dynamic Control Scheme for a Power-Electronics-Based PV Emulator. IEEE Journal of Photovoltaics, 2021, 11, 485-495.	2.5	16
11	Generalized Behavioral Modelling Methodology of Switch-Diode Cell for Power Loss Prediction in Electromagnetic Transient Simulation. Energies, 2021, 14, 1500.	3.1	1
12	Analysis and Validations of Modularized Distributed TL-UPQC Systems With Supervisory Remote Management System. IEEE Transactions on Smart Grid, 2021, 12, 2638-2651.	9.0	10
13	Stability Analysis of Power Hardware-in-the-Loop Architecture With Solar Inverter. IEEE Transactions on Industrial Electronics, 2021, 68, 4309-4319.	7.9	21
14	Design, Implementation, and Validation of Electro-Thermal Simulation for SiC MOSFETs in Power Electronic Systems. IEEE Transactions on Industry Applications, 2021, 57, 2714-2725.	4.9	9
15	Thermal-HIL Real-Time Testing Platform for Evaluating Cooling Systems of Power Rectifiers. , 2021, , .		1
16	A Power Electronics-based Power HIL Real Time Simulation Platform for Evaluating PV-BES Converters on DC Microgrids. , 2021, , .		0
17	Design of a Low-latency Power Electronics-based Power-HIL System for an EV Motor Controller. , 2021, , .		0
18	A Four-Quadrant Single-Phase Grid-Connected Converter With Only Two High-Frequency Switches. IEEE Transactions on Industrial Electronics, 2020, 67, 1899-1909.	7.9	5

#	ARTICLE	IF	CITATIONS
19	Manitoba Rectifier-“Bridgeless Buck-Boost PFC. IEEE Transactions on Power Electronics, 2020, 35, 403-414.	7.9	32
20	An Electrical Transient Model of IGBT-Diode Switching Cell for Power Semiconductor Loss Estimation in Electromagnetic Transient Simulation. IEEE Transactions on Power Electronics, 2020, 35, 2979-2989.	7.9	29
21	System Model and Performance Evaluation of Single-Stage Buck-Boost-Type Manitoba Inverter for PV Applications. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2020, 8, 3457-3466.	5.4	7
22	A Supervisory Remote Management System for Parallel Operation of Modularized D-STATCOM. , 2020, , .		2
23	Conceptual Design and Demonstration of an Automatic System for Extracting Switching Loss and Creating Data Library of Power Semiconductors. IEEE Open Journal of Power Electronics, 2020, 1, 431-444.	5.7	3
24	Modelling and Experimental Evaluation of Ideal Transformer Algorithm Interface for Power Hardware in the Loop Architecture. , 2020, , .		4
25	A Delay-Tolerable Master-Slave Current-Sharing Control Scheme for Parallel-Operated Interfacing Inverters With Low-Bandwidth Communication. IEEE Transactions on Industry Applications, 2020, 56, 1575-1586.	4.9	22
26	A Manitoba Converter based Bi-directional On-board charger for Plug-in Electric Vehicles. , 2020, , .		2
27	Reactive Power Modulation Strategy of a Single-stage Buck-boost-type Inverter. , 2020, , .		0
28	The Efficiency Enhancement of a Single-phase Single-stage Buck-boost type Manitoba Inverter Using SiC MOSFETs for Residential PV Applications. , 2020, , .		0
29	Advanced Digital Controller for Improving Input Current Quality of Integrated Active Virtual Ground-Bridgeless PFC. IEEE Transactions on Power Electronics, 2019, 34, 3921-3936.	7.9	9
30	Manitoba Inverter-“Single-Phase Single-Stage Buck-Boost VSI Topology. IEEE Transactions on Power Electronics, 2019, 34, 3445-3456.	7.9	25
31	A Remotely Central Dimming System for a Large-Scale LED Lighting Network Providing High Quality Voltage and Current. IEEE Transactions on Industry Applications, 2019, 55, 5455-5465.	4.9	10
32	A Datasheet-Based Behavioral Model of SiC MOSFET for Power Loss Prediction in Electromagnetic Transient Simulation. , 2019, , .		7
33	A Method for Solving Current Unbalance Problem of Paralleled Single-Phase Grid-Connected Unipolar-PWM Inverters With Common Dc Bus. IEEE Transactions on Industry Applications, 2019, 55, 7595-7603.	4.9	9
34	A Fast PV MPPT Scheme Using Boundary Control With Second-Order Switching Surface. IEEE Journal of Photovoltaics, 2019, 9, 849-857.	2.5	11
35	Transformerless Grid-Connected Converters Using Active Virtual Ground Technique for Single-Phase Microgrids. , 2019, , .		0
36	A Cost-effective, Compact, Automatic Testing System for Dynamic Characterization of Power Semiconductor Devices. , 2019, , .		4

#	ARTICLE	IF	CITATIONS
37	Design and Implementation of Switch-mode Solar Photovoltaic Emulator using Power-Hardware-in-the-loop Simulations for Grid Integration Studies. , 2019, , .		7
38	An FPGA-based Switch-mode Power Amplifier using Boundary Control to achieve High System Bandwidth. , 2019, , .		1
39	An Isolated Single-Stage Single-Phase Micro-Inverter Topology with Integrated Magnetic Components. , 2019, , .		1
40	Small-Signal Modelling and Design Validation of PV-Controllers With INC-MPPT Using CHIL. IEEE Transactions on Energy Conversion, 2019, 34, 361-371.	5.2	24
41	A Fast-Dynamic Unipolar Switching Control Scheme for Single-Phase Inverters in DC Microgrids. IEEE Transactions on Power Electronics, 2019, 34, 916-927.	7.9	23
42	A behavioral transient model of IGBT for switching cell power loss estimation in electromagnetic transient simulation. , 2018, , .		4
43	Active Virtual Groundâ€™ Single-Phase Transformerless Grid-Connected Voltage Source Inverter Topology. IEEE Transactions on Power Electronics, 2018, 33, 1335-1346.	7.9	42
44	Reactive Power Control for Single-Phase Grid-Tie Inverters Using Quasi-Sinusoidal Waveform. IEEE Transactions on Sustainable Energy, 2018, 9, 3-11.	8.8	21
45	Design of an inverter-side current reference and controller for a single-phase LCL-based grid-connected inverter. International Transactions on Electrical Energy Systems, 2018, 28, e2476.	1.9	13
46	Design of Magnetic Coupling Resonant Wireless Charging System for Cable Tunnel Inspection Robot. , 2018, , .		5
47	A Remotely Control Dimming System for LED Lamps with Power Factor Correction. , 2018, , .		4
48	Master-Slave Control of Parallel-Operated Interfacing Inverters Based on Wireless Digital Communication. , 2018, , .		10
49	Controller Implementation and Performance Evaluation of a High Power Three-Phase Active Power Filter using Controller Hardware-in-the-Loop Simulation. , 2018, , .		1
50	A Single Phase Hybrid Interleaved Parallel Boost PFC Converter. , 2018, , .		14
51	Low CM Leakage Current and High Efficiency H6 Inverter with Active Clamping for Transformerless PV System. , 2018, , .		3
52	Modelling and Stability Study of a Single Stage Buck-Boost Inverter for PV Application. , 2018, , .		0
53	Operation of Combined HF and LF Boost Stage Inductors in PFC Design. , 2018, , .		3
54	Load Detection Method and Control of Class-E Inverter for Dynamic Wireless Power Transfer. , 2018, , .		2

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55	Multisampling Maximum Power Point Tracker (MS-MPPT) to Compensate Irradiance and Temperature Changes. IEEE Transactions on Sustainable Energy, 2017, 8, 1096-1105.	8.8	26
56	A fast and accurate MPPT control technique using boundary controller for PV applications. , 2017, , .		2
57	Design, implementation and analysis of an advanced digital controller for active virtual ground-bridgeless PFC. , 2017, , .		2
58	Modified Cascaded Boundary-Deadbeat Control for a Virtually-Grounded Three-Phase Grid-Connected Inverter With LCL Filter. IEEE Transactions on Power Electronics, 2017, 32, 8163-8180.	7.9	32
59	Manitoba inverter â€” Single phase single-stage buck-boost VSI topology. , 2017, , .		2
60	A fast dynamic photovoltaic simulator with instantaneous output impedance matching controller. , 2017, , .		6
61	Active Virtual Groundâ€”Bridgeless PFC Topology. IEEE Transactions on Power Electronics, 2017, 32, 6206-6218.	7.9	36
62	Direct Current Tracking Using Boundary Control With Second-Order Switching Surface for Three-Phase Three-Wire Grid-Connected Inverter. IEEE Transactions on Power Electronics, 2017, 32, 5723-5740.	7.9	20
63	Design and implementation of laboratory scale static var compensator to demonstrate dynamic load balancing and power factor correction. , 2017, , .		3
64	Transformerless single-phase UPQC for large scale LED lighting networks. , 2017, , .		8
65	Stability study of power hardware in the loop (PHIL)simulations with a real solar inverter. , 2017, , .		7
66	Characterization of commercial LED lamps for power quality studies. , 2017, , .		16
67	Solar photovoltaic power in Manitoba. , 2017, , .		2
68	A current sharing technique for parallel-operated unipolar-PWM inverters. , 2017, , .		4
69	Manitoba rectifier â€” Bridgeless buck-boost PFC. , 2017, , .		5
70	DC bus splitting voltage feedforward injection method for virtually-grounded three-phase inverter. , 2016, , .		0
71	A fast dynamic unipolar switching control scheme for single phase inverters in DC microgrids. , 2016, , .		2
72	Current-mode boundary controller with reduced number of current sensors for a three-phase inverter. , 2016, , .		0

#	ARTICLE	IF	CITATIONS
73	Active virtual ground " bridgeless PFC topology. , 2016, , .		1
74	A review on Microgrid architectures and control methods. , 2016, , .		15
75	Use of Boundary Control With Second-Order Switching Surface to Reduce the System Order for Deadbeat Controller in Grid-Connected Inverter. IEEE Transactions on Power Electronics, 2016, 31, 2638-2653.	7.9	53
76	A New Coupled-Inductor Structure for Interleaving Bidirectional DC-DC Converters. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2015, 3, 841-849.	5.4	38
77	Concept of synthesizing modular power supply for interfacing diverse energy sources and loads. , 2015, , .		2
78	A Comparative Performance Study of an Interleaved Boost Converter Using Commercial Si and SiC Diodes for PV Applications. IEEE Transactions on Power Electronics, 2013, 28, 289-299.	7.9	108
79	Practical Design and Implementation Procedure of an Interleaved Boost Converter Using SiC Diodes for PV Applications. IEEE Transactions on Power Electronics, 2012, 27, 2835-2845.	7.9	106
80	High-Frequency Modeling of the Long-Cable-Fed Induction Motor Drive System Using TLM Approach for Predicting Overvoltage Transients. IEEE Transactions on Power Electronics, 2010, 25, 2653-2664.	7.9	125
81	Implementation and Performance Evaluation of a Fast Dynamic Control Scheme for Capacitor-Supported Interline DVR. IEEE Transactions on Power Electronics, 2010, 25, 1975-1988.	7.9	77
82	Constant-Frequency Hysteresis Current Control of Grid-Connected VSI Without Bandwidth Control. IEEE Transactions on Power Electronics, 2009, 24, 2484-2495.	7.9	168
83	Fixed-Frequency Boundary Control of Buck Converter With Second-Order Switching Surface. IEEE Transactions on Power Electronics, 2009, 24, 2193-2201.	7.9	76
84	Design and Implementation of a Fast Dynamic Control Scheme for Capacitor-Supported Dynamic Voltage Restorers. IEEE Transactions on Power Electronics, 2008, 23, 237-251.	7.9	77