Ka Hong Loo

List of Publications by Year
in descending order

94 papers	1,545 citations	279487 23 h-index	344852 36 g-index
94 all docs	94 docs citations	94 times ranked	1217 citing authors

#	Article	IF	Citations
1	A Compact Single-Phase ACâ€“DC Wireless Power Transfer Converter With Active Power Factor Correction. IEEE Transactions on Industrial Electronics, 2023, 70, 3685-3696.	5.2	13
2	Semi-decentralized energy routing algorithm for minimum-loss transmission in community energy internet. International Journal of Electrical Power and Energy Systems, 2022, 135, 107547.	3.3	11
3	Total Suppression of High-Frequency Transient Oscillations in Dual-Active-Bridge Series-Resonant Converter by Trajectory-Switching Modulation. IEEE Transactions on Power Electronics, 2022, 37, 6511-6529.	5.4	9
4	Peer-to-Peer Energy Trading With Energy Path Conflict Management in Energy Local Area Network. IEEE Transactions on Smart Grid, 2022, 13, 2269-2278.	6.2	13
5	A Soft-Switched Power-Factor-Corrected Single-Phase Bidirectional ACâ€“DC Wireless Power Transfer Converter With an Integrated Power Stage. IEEE Transactions on Power Electronics, 2022, 37, 10029-10044.	5.4	16
6	Anomaly Detection in the Internet of Vehicular Networks Using Explainable Neural Networks (xNN). Mathematics, 2022, 10, 1267.	1.1	12
7	An Immittance-Network-Based Multiport ZVS Bidirectional Converter With Power Decoupling Capability. IEEE Transactions on Power Electronics, 2022, 37, 12729-12740.	5.4	1
8	Accurate Three-Diode model estimation of Photovoltaic modules using a novel circle search algorithm. Ain Shams Engineering Journal, 2022, 13, 101824.	3.5	12
9	A Unified Design Approach of Optimal Transient Single-Phase-Shift Modulation for Nonresonant Dual-Active-Bridge Converter With Complete Transient DC-Offset Elimination. IEEE Transactions on Power Electronics, 2022, 37, 13217-13237.	5.4	4
10	Optimal PEM Fuel Cell Model Using a Novel Circle Search Algorithm. Electronics (Switzerland), 2022, 11, 1808.	1.8	8
11	A Multistructure Multimode Three-Phase Dual-Active-Bridge Converter Targeting Wide-Range High-Efficiency Performance. IEEE Transactions on Power Electronics, 2021, 36, 3078-3098.	5.4	7
12	Enhancement of DCâ€bus voltage regulation in cascaded converter system by a new sensorless load current feedforward control scheme. IET Power Electronics, 2021, 14, 1457-1467.	1.5	5
13	Design of High-Efficiency Inductive Charging System With Load-Independent Output Voltage and Current Tolerant of Varying Coupling Condition. IEEE Transactions on Power Electronics, 2021, 36, 13546-13561.	5.4	11
14	A Dynamic Series/Series-Parallel (S/SP) Compensated Wireless Battery Charger with Constant-Current and Constant-Voltage Outputs under Varying Coupling Condition. , 2021, , .		0
15	A Three-Phase Dual-Active-Bridge DCâ€“DC Converter With Reconfigurable Resonant Network for Efficient Wide Voltage Range Operation. IEEE Transactions on Power Electronics, 2020, 35, 1322-1339.	5.4	8
16	Optimal Modulation for a Fifth-Order Dual-Active-Bridge Resonant Immittance DCâ€“DC Converter. IEEE Transactions on Power Electronics, 2020, 35, 70-82.	5.4	9
17	Realization of High-Efficiency Dual-Active-Bridge Converter With Reconfigurable Multilevel Modulation Scheme. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2020, 8, 1178-1192.	3.7	9
18	A Single-Stage Dynamically Compensated IPT Converter With Unity Power Factor and Constant Output Voltage Under Varying Coupling Condition. IEEE Transactions on Power Electronics, 2020, 35, 10121-10136.	5.4	21

#	Article	IF	Citations
19	Dual-Mode Modulation Scheme With Seamless Transition for a Tunable Immittance-Based DAB Converter Featuring High-Efficiency Performance Over Whole Output Power Range. IEEE Transactions on Power Electronics, 2020, 35, 9184-9201.	5.4	9
20	A Structurally Reconfigurable Resonant Dual-Active-Bridge Converter and Modulation Method to Achieve Full-Range Soft-Switching and Enhanced Light-Load Efficiency. IEEE Transactions on Power Electronics, 2019, 34, 4195-4207.	5.4	34
21	Design, Analysis, and Performance Characterization of Dual-Active-Bridge DCâ€“DC Converter Utilizing Three-Phase Resonant Immittance Network. IEEE Transactions on Power Electronics, 2019, 34, 1159-1180.	5.4	8
22	A Reconfigurable Three-Phase Dual-Active-Bridge DC-DC Converter Designed for Wide-Range High-Efficiency Operation. , 2019, , .		1
23	A Four-Degrees-of-Freedom Modulation Strategy for Dual-Active-Bridge Series-Resonant Converter Designed for Total Loss Minimization. IEEE Transactions on Power Electronics, 2019, 34, 1065-1081.	5.4	71
24	A Dynamic S/SP Compensation Network for Achieving Unity-Power-Factor and Load-Independent Voltage Output under Varying Coupling Condition. , 2019, , .		0
25	A Reconfigurable Multilevel Dual-Active-Bridge Converter for Wide-Range High-Efficiency Operation. , 2019, , .		3
26	A Reconfigurable Dual-Active-Bridge Resonant Converter Designed for Wide-Load-Range High-Efficiency Operation. , 2019, , .		1
27	Disturbance-Observer-Based DC-Bus Voltage Control for Ripple Mitigation and Improved Dynamic Response in Two-Stage Single-Phase Inverter System. IEEE Transactions on Industrial Electronics, 2019, 66, 6836-6845.	5.2	39
28	Fully Soft-Switched Dual-Active-Bridge Series-Resonant Converter With Switched-Impedance-Based Power Control. IEEE Transactions on Power Electronics, 2018, 33, 9267-9281.	5.4	53
29	Independent Control of Multicolor-Multistring LED Lighting Systems With Fully Switched-Capacitor-Controlled LCC Resonant Network. IEEE Transactions on Power Electronics, 2018, 33, 4293-4305.	5.4	28
30	A Three-Phase Dual-Active-Bridge DC-DC Immittance Converter. , 2018, , .		1
31	Nonâ€intrusive parameter estimation method for autotuned DCâ€“DC converter based on quasiâ€impulse response. IET Power Electronics, 2018, 11, 2019-2028.	1.5	5
32	Accurate Capacitive Current Balancing in Multistring LED Lighting Systems Based on Switched-Capacitor-Controlled LCC Resonant Network. IEEE Transactions on Power Electronics, 2017, 32, 2167-2179.	5.4	16
33	A Family of Ripple Estimationâ€“Cancellation Methods Based on Switched-Resistor Circuits and Their Application in Fast-Response PFC Preregulator. IEEE Transactions on Power Electronics, 2017, 32, 2608-2621.	5.4	16
34	Extension of Soft-Switching Region of Dual-Active-Bridge Converter by a Tunable Resonant Tank. IEEE Transactions on Power Electronics, 2017, 32, 9093-9104.	5.4	76
35	Three-port ac-dc bidirectional converter with V2G reactive power support. , 2017, , .		2
36	Modeling the effect of dead-time on the soft-switching characteristic of variable-frequency modulated series-resonant DAB converter. , 2017, , .		16

#	Article	IF	Citations
37	Current-source PFC based LED drivers with electronic-smoothing inductor for AC power decoupling. , 2017, , .		3
38	Single-phase direct AC-DC bidirectional converter featuring natural power factor correction. , 2017, , .		0
39	Single-stage immittance-based three-phase AC-DC bidirectional converter and PWM strategy for realizing zero circulating power. , 2017, , .		2
40	SVM-plus-phase-shift modulation strategy for single-stage immittance-based three-phase AC-DC bidirectional converter. , 2017, , .		4
41	Digital autotuning controller for point-of-load converter based on non-intrusive start-up transient observer. , 2016, , .		1
42	Single-Stage Resonant AC-DC Dual Active Bridge Converter with Flexible Active and Reactive Power Control. , 2016, , .		6
43	A switched-inductor-augmented resonant DAB converter for achieving wide-range zero voltage switching. , 2016, , .		5
44	Capacitive current balancing for parallel-connected LED strings with tight load-regulation by switch-controlled capacitor. , 2016, , .		0
45	A hybrid AC/DC microgrid control scheme with voltage-source inverter-controlled interlinking converters. , 2016, , .		11
46	Output-Impedance Shaping of Bidirectional DAB DCâ€“DC Converter Using Double-Proportional-Integral Feedback for Near-Ripple-Free DC Bus Voltage Regulation in Renewable Energy Systems. IEEE Transactions on Power Electronics, 2016, 31, 2187-2199.	5.4	42
47	Unity-Power-Factor Control Based on Precise Ripple Cancellation for Fast-Response PFC Preregulator. IEEE Transactions on Power Electronics, 2016, 31, 3324-3337.	5.4	31
48	Simple carrierâ€based pulseâ€width modulation scheme for threeâ€phase fourâ€wire neutralâ€pointâ€clamped inverters with neutralâ€point balancing. IET Power Electronics, 2016, 9, 365-376.	1.5	18
49	An Alternative Approach to LED Driver Design Based on High-Voltage Driving. IEEE Transactions on Power Electronics, 2016, 31, 2465-2475.	5.4	32
50	Lowâ€current ripple LED driver by twoâ€phase driving approach. Electronics Letters, 2015, 51, 1804-1806.	0.5	1
51	Systematic Derivation of a Family of Output-Impedance Shaping Methods for Power Convertersâ€”A Case Study Using Fuel Cell-Battery-Powered Single-Phase Inverter System. IEEE Transactions on Power Electronics, 2015, 30, 5854-5869.	5.4	38
52	Frequency-Adaptive Filtering of Low-Frequency Harmonic Current in Fuel Cell Power Conditioning Systems. IEEE Transactions on Power Electronics, 2015, 30, 1966-1978.	5.4	28
53	Precise ripple cancellation technique for power-factor pre-regulator circuits. , 2014, , .		0
54	Color Control System for RGB LED With Application to Light Sources Suffering From Prolonged Aging. IEEE Transactions on Industrial Electronics, 2014, 61, 1788-1798.	5.2	51

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55	Elimination of electrolytic capacitor in LED power supplies by two-phase driving approach. , 2014, , .		3
56	Energy-Saving Driver Design for Full-Color Large-Area LED Display Panel Systems. IEEE Transactions on Industrial Electronics, 2014, 61, 4665-4673.	5.2	23
57	A generalized droop-control scheme for decentralized control of inverter-interfaced microgrids. , 2013, , .		27
58	Design and Analysis of LCC Resonant Network for Quasi-Lossless Current Balancing in Multistring AC-LED Array. IEEE Transactions on Power Electronics, 2013, 28, 1047-1059.	5.4	41
59	Reduction of low-frequency current ripples in fuel cell power conditioning systems using proportional-resonant control. , 2013, , .		0
60	Elimination of electrolytic capacitor through high-voltage driving of LED aided by third-order harmonic current injection. , 2013, , .		5
61	Energy efficient LED driving system for large-scale Video display panel. , 2013, , .		2
62	Design considerations of a half-bridge LCC inverter with current balancing for AC-LED. , 2012, , .		0
63	Color control in RGB driver system applicable to LED of all ageing conditions. , 2012, , .		2
64	A high-output-current and low-power-loss thin-film transistor liquid-crystal display (TFT-LCD) driver for portable devices. International Journal of Power Electronics, 2012, 4, 240.	0.1	0
65	Sequential Variable Bilevel Driving Approach Suitable for Use in High-Color-Precision LED Display Panels. IEEE Transactions on Industrial Electronics, 2012, 59, 4637-4645.	5.2	23
66	On the Color Stability of Phosphor-Converted White LEDs Under DC, PWM, and Bilevel Drive. IEEE Transactions on Power Electronics, 2012, 27, 974-984.	5.4	62
67	A triple-droop control scheme for inverter-based microgrids. , 2012, , .		11
68	Synthesis of two-state ladder-structured DC-DC power converters by duality principle. , 2012, , .		6
69	Quasi-Maximum Efficiency Point Tracking for Direct Methanol Fuel Cell in DMFC/Supercapacitor Hybrid Energy System. IEEE Transactions on Energy Conversion, 2012, 27, 561-571.	3.7	28
70	A multi-input bi-directional converter with decoupled power distribution control. , 2012, , .		1
71	Effects of Imperfect Sinusoidal Input Currents on the Performance of a Boost PFC Pre-Regulator. Journal of Power Electronics, 2012, 12, 689-698.	0.9	5
72	Development of a maximum-power-point tracking algorithm for direct methanol fuel cell and its realization in a fuel cell/supercapacitor hybrid energy system. , 2011, , .		15

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73	A low-cost method for minimizing the chromaticity shift of dc-driven phosphor-converted white LEDs by thermal design. , 2011, , .		2
74	A single-stage bridgeless power-factor-correction rectifier based on flyback topology. , 2011, , .		8
75	Stationary and Adaptive Color-Shift Reduction Methods Based on the Bilevel Driving Technique for Phosphor-Converted White LEDs. IEEE Transactions on Power Electronics, 2011, 26, 1943-1953.	5.4	27
76	A theoretical study of inlet relative humidity control in PEM fuel cell. International Journal of Hydrogen Energy, 2011, 36, 11871-11885.	3.8	43
77	Treatment of two-phase flow in cathode gas channel for an improved one-dimensional proton exchange membrane fuel cell model. International Journal of Hydrogen Energy, 2011, 36, 3941-3955.	3.8	5
78	Derivation of a Fast Mathematical Model of PEM Fuel Cell With Two-Phase Water Transport. IEEE Transactions on Energy Conversion, 2011, 26, 216-226.	3.7	5
79	Variable bi-level phase-shifted driving method for high-power RGB LED lamps. , 2011, , .		0
80	Characterization of the dynamic response of proton exchange membrane fuel cells â€“ A numerical study. International Journal of Hydrogen Energy, 2010, 35, 11861-11877.	3.8	49
81	Modeling the Effects of Gas Channel Flooding on the Voltage-Current Characteristics of PEM Fuel Cell. , 2010, , .		0
82	Implementation of bi-level current driving technique for improved efficacy of high-power LEDs. , 2009, , .		5
83	On the driving techniques for high-brightness LEDs. , 2009, , .		10
84	Bilevel Current Driving Technique for LEDs. IEEE Transactions on Power Electronics, 2009, 24, 2920-2932.	5.4	114
85	On Driving Techniques for LEDs: Toward a Generalized Methodology. IEEE Transactions on Power Electronics, 2009, 24, 2967-2976.	5.4	118
86	Temporal VUV Emission Characteristics Related to Generations and Losses of Metastable Atoms in Xenon Pulsed Barrier Discharge. Journal of Light and Visual Environment, 2006, 30, 81-86.	0.2	3
87	A Dynamic Conductance Model of Fluorescent Lamp for Electronic Ballast Design Simulation. IEEE Transactions on Power Electronics, 2005, 20, 1178-1185.	5.4	16
88	Emission Characteristics of Xenon and Xenon-Rare Gas Dielectric Barrier Discharge Fluorescent Lamps. Journal of Light and Visual Environment, 2005, 29, 91-98.	0.2	11
89	Relative enhancement of near-UV emission from a pulsed low-pressure mercury discharge lamp, using a rare gas mixture. Journal Physics D: Applied Physics, 2004, 37, 1630-1638.	1.3	14
90	A Dynamic Collisional-Radiative Model of A Low-Pressure Mercuryâ€“Argon Discharge Lamp: A Physical Approach to Modeling Fluorescent Lamps for Circuit Simulations. IEEE Transactions on Power Electronics, 2004, 19, 1117-1129.	5.4	31

#	Article	IF	Citations
91	A dynamic conductance model of fluorescent lamp for electronic ballast design simulation. , 0, , .		2
92	Characteristics of positive column contraction of xenon fluorescent lamps with two-pairs of electrodes in pulsed discharge. , 0, , .		2
93	Modeling the electrical behavior of fluorescent lamps on the basis of a self-consistent collisional-radiative model. , 0, , .		5
94	A computationally efficient hybrid optimizationâ€based model predictive control for inductive power transfer systems. IET Power Electronics, 0, , .	1.5	0