

Xinke Wu

List of Publications by Year in descending order

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144
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144
docs citations

144
times ranked

2409
citing authors

#	ARTICLE	IF	CITATIONS
1	External Magnetic Field Minimization for the Integrated Magnetics in Series Resonant Converter. IEEE Transactions on Power Electronics, 2022, 37, 498-508.	5.4	9
2	A Simplified Real-Time Digital Control Scheme for ZVS Four-Switch Buck-Boost With Low Inductor Current. IEEE Transactions on Industrial Electronics, 2022, 69, 7920-7929.	5.2	24
3	Short-Circuit and Over-Current Fault Detection for SiC MOSFET Modules Based on Tunnel Magnetoresistance With Predictive Capabilities. IEEE Transactions on Power Electronics, 2022, 37, 3719-3723.	5.4	5
4	A 98.4% Efficiency 380V-12V DCX With 1.3kW/in ³ Power Density Using Low NFoM Devices and Resonant Drive Transformer. IEEE Transactions on Power Electronics, 2022, 37, 12346-12356.	5.4	9
5	Steady-State and Transient DC Magnetic Flux Bias Suppression Methods for a Dual Active Bridge Converter. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2021, 9, 744-753.	3.7	29
6	1 MHz 48V-12 V Regulated DCX With Single Transformer. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2021, 9, 38-47.	3.7	20
7	Analysis and Suppression of Common-Mode EMI Noise in 1 MHz 380 V-12 V DCX Converter With Low NFoM Devices. IEEE Transactions on Power Electronics, 2021, 36, 7903-7913.	5.4	4
8	Mirror-Bridge Phase-Shift Modulation With Low Common-Mode Noise for Single-Phase CHB PFC. IEEE Transactions on Power Electronics, 2021, 36, 13716-13725.	5.4	9
9	A novel ZVS Control Scheme for Four-Switch Resonance Inverting bidirectional buck-boost DC/DC Converter for 5G-RF Power Amplifier. , 2021, , .		3
10	A Current-Sharing Method for Interleaved High-Frequency LLC Converter With Partial Energy Processing. IEEE Transactions on Industrial Electronics, 2020, 67, 1498-1507.	5.2	27
11	High Efficiency High Density 1 MHz 380V-12 V DCX With Low FoM Devices. IEEE Transactions on Industrial Electronics, 2020, 67, 1648-1656.	5.2	29
12	High-Temperature Characterization of a 1.2-kV SiC MOSFET Using Dynamic Short-Circuit Measurement Technique. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2020, 8, 215-222.	3.7	19
13	High Power Density 48V-12 V DCX With 3-D PCB Winding Transformer. IEEE Transactions on Power Electronics, 2020, 35, 1189-1193.	5.4	10
14	FoM Based Optimal Frequency and Voltage Level Design for High efficiency High density Multilevel PFC with GaN Device. , 2020, , .		18
15	Impedance-Balancing-based Modulation Strategy for Common-Mode Noise Elimination of CHB Converter. , 2020, , .		5
16	Tunnel Magnetoresistance-Based Short-Circuit and Over-Current Protection for IGBT Module. IEEE Transactions on Power Electronics, 2020, 35, 10930-10944.	5.4	38
17	Modeling and Design of Integrated Inductor and Transformer Considering Superposed Flux Density in On-Board-Charger. , 2020, , .		6
18	Accurate Analytical Switching-On Loss Model of SiC MOSFET Considering Dynamic Transfer Characteristic and $\langle i_Q \rangle_{gd}$. IEEE Transactions on Power Electronics, 2020, 35, 12264-12273.	5.4	21

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19	Dynamic on-State Resistance Test and Evaluation of GaN Power Devices Under Hard- and Soft-Switching Conditions by Double and Multiple Pulses. IEEE Transactions on Power Electronics, 2019, 34, 1044-1053.	5.4	126
20	Low Common Mode Noise Half-Bridge <i>LLC</i> DC-DC Converter With an Asymmetric Center Tapped Rectifier. IEEE Transactions on Power Electronics, 2019, 34, 1032-1037.	5.4	21
21	Suppressing Methods of Common-Mode Noise in LLC Resonant DC-DC Converters. , 2019, , .		5
22	Circulating Current and ZVS-on of a Dual Active Bridge DC-DC Converter: A Review. IEEE Access, 2019, 7, 50561-50572.	2.6	107
23	Suppressing Methods of Parasitic Capacitance Caused Interference in a SiC MOSFET Integrated Power Module. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2019, 7, 745-752.	3.7	16
24	Suppressing Method of Common-Mode Noise in MHz 380V-12V DCX Converter. , 2019, , .		2
25	An Analog-based, Duty Cycle Modulation Method to Remove the DC Bias in the Transformer for a Dual Active Bridge Converter. , 2019, , .		2
26	Current-Collapse-Free and Fast Reverse Recovery Performance in Vertical GaN-on-GaN Schottky Barrier Diode. IEEE Transactions on Power Electronics, 2019, 34, 5012-5018.	5.4	56
27	A Constant Frequency ZVS Control System for the Four-Switch Buck-Boost DC-DC Converter With Reduced Inductor Current. IEEE Transactions on Power Electronics, 2019, 34, 5996-6003.	5.4	51
28	Analysis of MHz 380V-12V DCX with Low FoM Device. , 2019, , .		2
29	Accurate Operating Analysis of Boundary Mode Totem-Pole Boost PFC Converter Considering the Reverse Recovery of mosfet. IEEE Transactions on Power Electronics, 2018, 33, 10038-10043.	5.4	15
30	Active-Clamp ZVZCS Resonant Forward DC Transformer (DCX) With Load-Adaptive ON-Time Control. IEEE Transactions on Power Electronics, 2018, 33, 10490-10500.	5.4	7
31	A Capacitor Voltage Balancing Method for a Modular Multilevel DC Transformer for DC Distribution System. IEEE Transactions on Power Electronics, 2018, 33, 3002-3011.	5.4	58
32	Application of Tunnel Magnetoresistance to Health Monitoring of Modular Multilevel Converter Submodules. , 2018, , .		8
33	A MHz Regulated DC Transformer with Wide Voltage Range. , 2018, , .		8
34	Re-examination of ZVS Condition for MHz LLC Converter Operating at Resonant Frequency. , 2018, , .		15
35	Constant Burst Frequency Control for LLC Converters with Trajectory Control. , 2018, , .		6
36	Analysis of gate signal interference in an integrated SiC MOSFET module. , 2018, , .		1

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37	Dynamic on-state resistance evaluation of GaN devices under hard and soft switching conditions. , 2018, , .		10
38	A Family of DC Transformer (DCX) Topologies Based on New ZVZCS Cells With DC Resonant Capacitance. IEEE Transactions on Power Electronics, 2017, 32, 2822-2834.	5.4	35
39	A High-Efficiency Quasi-Two-Stage LED Driver With Multichannel Outputs. IEEE Transactions on Industrial Electronics, 2017, 64, 5875-5882.	5.2	18
40	Current-Feed Single-Switch Forward Resonant DC Transformer (DCX) With Secondary Diode-Clamping. IEEE Transactions on Industrial Electronics, 2017, 64, 7790-7799.	5.2	20
41	Analysis and design considerations for an improved BCM buck ac-dc LED driver with high output voltage and low total harmonic distortion. , 2017, , .		0
42	Short circuit capability and high temperature channel mobility of SiC MOSFETs. , 2017, , .		36
43	A novel fixed off-time control method for single-phase micro-inverter without sensing inductor current. , 2017, , .		3
44	A High Efficiency two-stage ZVS AC/DC converter with all SiC MOSFET. , 2017, , .		2
45	Optimal design of SiC MOSFETs for 20kW DCDC converter. , 2017, , .		2
46	A Family of Single-Phase Hybrid Step-Down PFC Converters. IEEE Transactions on Power Electronics, 2017, 32, 5271-5281.	5.4	52
47	An Improved Variable On-Time Control Strategy for a CRM Flyback PFC Converter. IEEE Transactions on Power Electronics, 2017, 32, 915-919.	5.4	57
48	Analysis and reduction of common mode current of the transformer in a full-bridge LLC battery charger. , 2017, , .		6
49	Phase leading input current compensation for CRM boost PFC converter. , 2016, , .		1
50	A single phase T-type inverter operating in boundary conduction mode. , 2016, , .		13
51	1MHz LLC resonant DC-DC converter with PWM output regulation capability. , 2016, , .		6
52	Comparison and analysis of short circuit capability of 1200V single-chip SiC MOSFET and Si IGBT. , 2016, , .		34
53	A 1-MHz ZVS Boost DC-DC converter with active clamping using GaN power transistors. , 2016, , .		1
54	1-MHz LLC Resonant DC Transformer (DCX) With Regulating Capability. IEEE Transactions on Industrial Electronics, 2016, 63, 2904-2912.	5.2	80

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55	Evaluation of reverse recovery characteristic of silicon carbide metal-oxide-semiconductor field-effect transistor intrinsic diode. IET Power Electronics, 2016, 9, 969-976.	1.5	28
56	A Bidirectional Three-Level LLC Resonant Converter With PWAM Control. IEEE Transactions on Power Electronics, 2016, 31, 2213-2225.	5.4	90
57	A family of ZVSZCS resonant DCX with DC resonant capacitor. , 2015, , .		0
58	A high power buck derived non-isolated AC/DC LED driver. , 2015, , .		2
59	Impact of common source inductance on switching loss of SiC MOSFET. , 2015, , .		12
60	Interleaved Phase-Shift Full-Bridge Converter With Transformer Winding Series-Parallel Autoregulated (SPAR) Current Doubler Rectifier. IEEE Transactions on Power Electronics, 2015, 30, 4864-4873.	5.4	30
61	A 10kV/200A SiC MOSFET module with series-parallel hybrid connection of 1200V/50A dies. , 2015, , .		22
62	A Bidirectional LLC Resonant Converter With Automatic Forward and Backward Mode Transition. IEEE Transactions on Power Electronics, 2015, 30, 757-770.	5.4	204
63	Analysis and Design Considerations of LLC Resonant Multioutput DC/DC LED Driver With Charge Balancing and Exchanging of Secondary Series Resonant Capacitors. IEEE Transactions on Power Electronics, 2015, 30, 780-789.	5.4	53
64	A 10kV/200A SiC MOSFET module with series-parallel hybrid connection. , 2014, , .		2
65	LLC resonant DC transformer (DCX) with parallel PWM output tight regulation. , 2014, , .		10
66	Analysis on reverse recovery characteristic of SiC MOSFET intrinsic diode. , 2014, , .		23
67	A novel current-feed soft-switching two-switch forward resonant DC-DC Transformer (DCX). , 2014, , .		6
68	Current balance method for the two-phase interleaved LLC-RDCX with parallel PWM output regulation. , 2014, , .		8
69	Analysis of stray inductance's influence on SiC MOSFET switching performance. , 2014, , .		18
70	A 3600 V/80 A Series-Parallel-Connected Silicon Carbide MOSFETs Module With a Single External Gate Driver. IEEE Transactions on Power Electronics, 2014, 29, 2296-2306.	5.4	84
71	Analysis and design considerations of two-stage AC-DC LED driver without electrolytic capacitor. , 2014, , .		14
72	Analysis on the influence of the secondary parasitic capacitance to ZVS transient in LLC resonant converter. , 2014, , .		38

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73	A family of single-phase hybrid step-down PFC converters. , 2014, , .		1
74	Series-Parallel Autoregulated Charge-Balancing Rectifier for Multioutput Light-Emitting Diode Driver. IEEE Transactions on Industrial Electronics, 2014, 61, 1262-1268.	5.2	44
75	Analysis of Unified Output MPPT Control in Subpanel PV Converter System. IEEE Transactions on Power Electronics, 2014, 29, 1275-1284.	5.4	71
76	Design and experimental analysis of a 1 kW, 800 kHz all-SiC boost DC-DC converter. , 2014, , .		5
77	An All-SiC High-Frequency Boost DC-DC Converter Operating at 320 Å°C Junction Temperature. IEEE Transactions on Power Electronics, 2014, 29, 5091-5096.	5.4	73
78	State-of-the-art multiple outputs high brightness (HB) LED driving technology. , 2014, , .		6
79	Design Considerations for Dual-Output Quasi-Resonant Flyback LED Driver With Current-Sharing Transformer. IEEE Transactions on Power Electronics, 2013, 28, 4820-4830.	5.4	66
80	Analysis and design of a ZVS boost/buck-boost dual mode PFC converter with universal input and wide output voltages. , 2013, , .		3
81	Hybrid passive current sharing method for multi-channel SRC LED driver. , 2013, , .		3
82	A multi-channel Dc/Dc LED driver with inductor-less series-parallel auto-regulated rectifier. , 2013, , .		0
83	A 3600 V/80 a single external-driver series connected circuit with three Silicon Carbide MOSFETs. , 2013, , .		0
84	Primary side feedforward control for TRIAC dimmable light emitting diode driver with Constant Power. IET Power Electronics, 2013, 6, 572-580.	1.5	12
85	Analysis and design of LLC resonant four-channel DC-DC LED driver with current sharing transformer. , 2013, , .		3
86	Small signal modeling and analysis of interleaved active-clamp forward converter with parallel input and series-parallel output. , 2012, , .		1
87	A hybrid ZVS full-bridge converter with transformer winding series-parallel auto regulated current doubler rectifier. , 2012, , .		5
88	A hybrid push-pull converter with series-parallel structure in the primary windings. , 2012, , .		0
89	Optimal design methodology for the current-sharing transformer in a quasi-resonant (QR) flyback LED driver. , 2012, , .		4
90	High input voltage single-stage flyback AC/DC LED driver using series-connected MOSFETs. , 2012, , .		7

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91	A hybrid ZVZCS phase-shift full-bridge converter with series/parallel auto-regulated transformer windings. , 2012, , .		4
92	A Capacitor-Isolated LED Driver With Inherent Current Balance Capability. IEEE Transactions on Industrial Electronics, 2012, 59, 1708-1716.	5.2	99
93	A Precise Passive Current Balancing Method for Multioutput LED Drivers. IEEE Transactions on Power Electronics, 2011, 26, 2149-2159.	5.4	89
94	A novel high efficiency and low-cost current balancing method for multi-LED driver. , 2011, , .		18
95	Design Considerations of Soft-Switched Buck PFC Converter With Constant On-Time (COT) Control. IEEE Transactions on Power Electronics, 2011, 26, 3144-3152.	5.4	79
96	Variable on-time controlled ZVS buck PFC converter for HB-LED application. , 2011, , .		9
97	Multi-channel constant current (MC<sup>3</sup>) LLC resonant LED driver. , 2011, , .		17
98	A Simple Two-Channel LED Driver With Automatic Precise Current Sharing. IEEE Transactions on Industrial Electronics, 2011, 58, 4783-4788.	5.2	105
99	An Adaptive Blanking Time Control Scheme for an Audible Noise-Free Quasi-Resonant Flyback Converter. IEEE Transactions on Power Electronics, 2011, 26, 2735-2742.	5.4	26
100	A New Current-Driven Synchronous Rectifier for Series"Parallel Resonant (\$LLC\$) DC"DC Converter. IEEE Transactions on Industrial Electronics, 2011, 58, 289-297.	5.2	97
101	The voltage sharing of commercial IGBTs in series with passive components. , 2011, , .		12
102	Analysis and design considerations of LLC resonant Dc-Dc converter with precise current sharing for two-channel LED driver. , 2011, , .		12
103	Performance comparison between buck and boost CRM PFC converter. , 2010, , .		39
104	Optimal design for the damping resistor in RCD-R snubber to suppress common-mode noise. , 2010, , .		14
105	A Novel Symmetrical Rectifier Configuration With Low Voltage Stress and Ultralow Output-Current Ripple. IEEE Transactions on Power Electronics, 2010, 25, 1820-1831.	5.4	14
106	A High Efficiency Flyback Converter With New Active Clamp Technique. IEEE Transactions on Power Electronics, 2010, 25, 1775-1785.	5.4	159
107	Design considerations of a self-biased current driven SR in DCM flyback DC/DC converter. , 2010, , .		0
108	A novel current driven method for center-tapped synchronous rectifier. , 2010, , .		6

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109	Analysis and design considerations for EMI and losses of RCD snubber in flyback converter. , 2010, , .		35
110	A novel equalization method with defective-battery-replacing for series-connected lithium battery strings. , 2009, , .		10
111	Integrated Magnetics ZVS Full-Bridge Converter with Phase-Shift control. , 2009, , .		3
112	Optimum Design Consideration and Implementation of a Novel Synchronous Rectified Soft-Switched Phase-Shift Full-Bridge Converter for Low-Output-Voltage High-Output-Current Applications. IEEE Transactions on Power Electronics, 2009, 24, 388-397.	5.4	86
113	Design and Comparison of Two Front-end Dc/Dc Converters: LLC Resonant Converter and Soft-switched Phase-shifted Full-bridge Converter with Primary-side Energy Storage Inductor. , 2009, , .		13
114	Variable frequency PWM controlled soft switched FB-PESI Dc/Dc converter. , 2009, , .		2
115	Design consideration of the voltage stress clamping rectifier configuration used for the front-end Dc/Dc converter with the capacitive output filter. , 2009, , .		4
116	LLC resonant DC/DC converter with current-driven synchronized voltage-doubler rectifier. , 2009, , .		18
117	Current driven synchronous rectifier with primary current sensing for LLC converter. , 2009, , .		10
118	A New Interleaved Active-Clamp Forward Converter with Parallel Input and Series-Parallel Output. , 2009, , .		17
119	A novel hybrid 3-phase PWM current source rectifier using SCRs and IGBTs. , 2009, , .		2
120	Low Voltage and Current Stress ZVZCS Full Bridge DC-DC Converter Using Center Tapped Rectifier Reset. IEEE Transactions on Industrial Electronics, 2008, 55, 1470-1477.	5.2	91
121	The analysis and evaluation for the leakage inductance effects of two front-end Dc/Dc converters with capacitive output filter. , 2008, , .		6
122	Analysis and Derivations for a Family ZVS Converter Based on a New Active Clamp ZVS Cell. IEEE Transactions on Industrial Electronics, 2008, 55, 773-781.	5.2	88
123	A New ZVS-PWM Buck converter with an active clamping cell. , 2007, , .		3
124	ZVZCS Full Bridge Dc-Dc Converter with Reduced Circulating Loss and Filter Requirement. Conference Record - IAS Annual Meeting (IEEE Industry Applications Society), 2007, , .	0.0	1
125	ZVZCS Full Bridge Dc-Dc Converter with Reduced Circulating Loss and Filter Requirement. Conference Record - IAS Annual Meeting (IEEE Industry Applications Society), 2007, , .	0.0	7
126	Soft Switched Full Bridge DC-DC Converter With Reduced Circulating Loss and Filter Requirement. IEEE Transactions on Power Electronics, 2007, 22, 1949-1955.	5.4	62

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127	Wide Input Voltage Isolated Dc-Dc Converter with Interleaving Control. , 2006, , .		1
128	Analysis and Design for a New ZVS DC DC Converter With Active Clamping. IEEE Transactions on Power Electronics, 2006, 21, 1572-1579.	5.4	23
129	A novel zero-current-transition full bridge DC/DC converter. IEEE Transactions on Power Electronics, 2006, 21, 354-360.	5.4	54
130	A General Method for Two-Level Bridge Type DC/DC Converter to Three-Level DC/DC Converter. , 2006, , .		2
131	New ZCT-PWM Cell for DC-DC Converters with Reduced Current Stress and Conduction Loss. , 2005, , .		4
132	A Novel High Efficiency Power Factor Correction Converter With Soft Switching. , 2005, , .		0
133	A family of non-isolated ZVS DC-DC converter based on a new active clamp cell. , 2005, , .		6
134	A novel fully soft switched (zero voltage on and zero current off) boost converter with reduced conduction loss. , 0, , .		0
135	A novel single-stage ZVSZCS PFC half-bridge AC-DC converter with reduced voltage stress. , 0, , .		0
136	Optimum design considerations for a high efficiency ZVS full bridge DC-DC converter. , 0, , .		7
137	An improved high efficiency full bridge ZVS DC-DC converter with overall load range soft switching. , 0, , .		6
138	A new ZVZCS full bridge converter with an auxiliary center tapped rectifier. , 0, , .		0
139	A novel phase shift controlled ZVZCS full bridge DC-DC converter: analysis and design considerations. , 0, , .		6
140	A novel single-stage low-frequency square-wave electronic ballast for low-wattage HID lamps. , 0, , .		20
141	A new zero voltage switching boost dc-dc converter with active clamping. , 0, , .		6
142	A novel common-mode conducted EMI filter for boost PFC converter. , 0, , .		2
143	High Efficiency Phase-shift Controlled Hybrid Full Bridge DC Bus Converter. , 0, , .		10
144	High Efficiency PFC Converter with Clamp-mode Soft Switching. , 0, , .		0