Guidong Zhang

List of Publications by Year in Descending Order

64 papers	616 citations	14 h-index	23 g-index
69 ext. papers	924 ext. citations	4.9 avg, IF	4.49 L-index

#	Paper	IF	Citations
64	A multi-timescale smart grid energy management system based on adaptive dynamic programming and Multi-NN Fusion prediction method. *Knowledge-Based Systems*, **2022**, 241, 108284	7.3	0
63	Four Novel Embedded Z-Source DC□DC Converters. *IEEE Transactions on Power Electronics*, **2022**, 37, 607-616	7.2	4
62	Replacing All ECs With NECs in Step-Up Converters□A Systematic Approach. *IEEE Transactions on Power Electronics*, **2022**, 37, 31-36	7.2	1
61	A Graph-Modeling Approach to Topology Simplification in Power Converters. *IEEE Transactions on Power Electronics*, **2022**, 37, 8248-8261	7.2	0
60	A General Polynomial Reverse Design of Step-up Converters for EV Battery Applications. *IEEE Transactions on Vehicular Technology*, **2021**, 1-1	6.8	0
59	Analytical Determination of Fast-Scale Instability Boundaries for Current Mode Controlled DC□DC Converters With CPL and Closed Voltage Loop. *IEEE Journal on Emerging and Selected Topics in Circuits and Systems*, **2021**, 11, 39-48	5.2	2
58	Performance evaluation for an hourglass-shaped impedance-network-based high step-up converter in a photovoltaic system using PSIM□ simulation. *International Journal of Circuit Theory and Applications*, **2021**, 49, 2670-2685	2	0
57	Non-electrolytic-capacitor boost converter with non-pulsating ripple-free output current. *International Journal of Circuit Theory and Applications*, **2021**, 49, 2719-2735	2	0
56	A Self-Protected Single-Stage LLC Resonant Rectifier. *IEEE Journal of Emerging and Selected Topics in Power Electronics*, **2021**, 9, 3361-3372	5.6	5
55	Generalized Flexible Voltage Pumping Module for Extra High Voltage Gain Converters in Electric Vehicles. *IEEE Transactions on Vehicular Technology*, **2021**, 70, 6463-6471	6.8	0
54	. *IEEE Journal of Emerging and Selected Topics in Power Electronics*, **2021**, 9, 1891-1904	5.6	3
53	Novel method to operation conditions identification of high-order power converters. *Journal of Advanced Research*, **2021**, 28, 175-181	13	2
52	Hourglass-shaped impedance network based nonelectrolytic capacitors high step-up converter with low voltage stress. *International Journal of Circuit Theory and Applications*, **2021**, 49, 1147-1163	2	3
51	Controllability Analysis and Verification for High-Order DC□DC Converters Using Switched Linear Systems Theory. *IEEE Transactions on Power Electronics*, **2021**, 1-1	7.2	3
50	Novel Cuk-Based Bridgeless Rectifier of WPT System with Wide Power Modulation Range and Low Current Ripple. *IEEE Transactions on Industrial Electronics*, **2021**, 1-1	8.9	0
49	An X-shaped-switching-network high-step-up converter for grid integration of renewable energy sources. *AEU - International Journal of Electronics and Communications*, **2021**, 136, 153776	2.8	1
48	Impedance Strengthening and Weakening Networks for Power Converter Analysis and Design. *IEEE Transactions on Power Electronics*, **2021**, 36, 9717-9721	7.2	4

47	Sneak Circuit Theory Based Approach to Avoiding Short-Circuit Paths in Reconfigurable Battery Systems. *IEEE Transactions on Industrial Electronics*, **2021**, 68, 12353-12363	8.9	3
46	Design and HIL Realization of an Online Adaptive Dynamic Programming Approach for Real-time Economic Operations of Household Energy Systems. *IEEE Transactions on Smart Grid*, **2021**, 1-1	10.7	3
45	Enhanced One-Cycle Control for Multicell Power Converters. *IEEE Transactions on Power Electronics*, **2020**, 35, 8846-8856	7.2	6
44	Boost-type push□ull converter with reduced switches. *Journal of Power Electronics*, **2020**, 20, 645-656	0.9	0
43	Adaptive Modulation Strategy for Modular Multilevel High-Frequency DC Transformer in DC Distribution Networks. *IEEE Access*, **2020**, 8, 16397-16408	3.5	4
42	Forming a Reliable Hybrid Microgrid Using Electric Spring Coupled With Non-Sensitive Loads and ESS. *IEEE Transactions on Smart Grid*, **2020**, 11, 2867-2879	10.7	8
41	A Multiple Modular Isolated DC/DC Converter With Bidirectional Fault Handling and Efficient Energy Conversion for DC Distribution Network. *IEEE Transactions on Power Electronics*, **2020**, 35, 11502-11517	7.2	8
40	Control Design and Performance Analysis of a Double-Switched LLC Resonant Rectifier for Unity Power Factor and Soft-Switching. *IEEE Access*, **2020**, 8, 44511-44521	3.5	12
39	An extendable single-switch n-cell boost converter with high voltage gain and low components stress for renewable energy. *International Journal of Circuit Theory and Applications*, **2020**, 48, 817-831	2	3
38	LLC resonant converter topologies and industrial applications □A review. *Chinese Journal of Electrical Engineering*, **2020**, 6, 73-84	4	24
37	Fast Voltage-Based MPPT Control for High Gain Switched Inductor DC-DC Boost Converters **2020**,		1
36	Advanced four-mode-modulation-based four-switch non-inverting buck□boost converter with extra operation zone. *IET Power Electronics*, **2020**, 13, 2049-2059	2.2	7
35	. *IEEE Access*, **2020**, 8, 140293-140302	3.5	4
34	A Novel Impedance-Network-Based Electric Spring. *IEEE Access*, **2020**, 8, 129123-129135	3.5	1
33	4-kW 3-phase rectifier with high efficiency and wide operational range via 3-mode SVPWM. *Journal of Power Electronics*, **2020**, 20, 1433-1444	0.9	0
32	A Waveform-Subtraction Based Single-Stage Ripple-Suppression Converter Family for Multiple Waveform Generation. *IEEE Transactions on Industrial Electronics*, **2020**, 67, 1890-1898	8.9	
31	. *IEEE Transactions on Power Delivery*, **2020**, 35, 1330-1338	4.3	8
30	A Novel Alternative to Traditional n HSLC: An n -Switched-Cell Based Approach to High-Step-up Converters. *IEEE Access*, **2019**, 7, 114529-114538	3.5	2

29	A Fractional-Order Element (FOE)-Based Approach to Wireless Power Transmission for Frequency Reduction and Output Power Quality Improvement. *Electronics (Switzerland)*, **2019**, 8, 1029	2.6	4
28	Improvement of Stability in a PCM-Controlled Boost Converter with the Target Period Orbit-Tracking Method. *Electronics (Switzerland)*, **2019**, 8, 1432	2.6	1
27	A Family of Y-Impedance-Network Half-Bridge Converters with Additional Voltage Adjustment Function. *Energies*, **2019**, 12, 3430	3.1	1
26	Advanced small-signal-based analytical approach to modelling high-order power converters. *IET Power Electronics*, **2019**, 12, 228-236	2.2	3
25	Sneak Circuit Identification of an Improved Boost Converter With Soft-Switching Realization. *IEEE Journal of Emerging and Selected Topics in Power Electronics*, **2019**, 7, 2394-2402	5.6	3
24	A Generalized Additional Voltage Pumping Solution for High-Step-Up Converters. *IEEE Transactions on Power Electronics*, **2019**, 34, 6456-6467	7.2	16
23	A Simplified Modulation Strategy of Nine-Switch Inverter to Cut Off Half of Switching Modes. *IEEE Access*, **2018**, 6, 7254-7261	3.5	21
22	Unique Modular Structure of Multicell High-Boost Converters With Reduced Component Currents. *IEEE Transactions on Power Electronics*, **2018**, 33, 7795-7804	7.2	14
21	Power electronics converters: Past, present and future. *Renewable and Sustainable Energy Reviews*, **2018**, 81, 2028-2044	16.2	72
20	A Single-Switch Quadratic BuckBoost Converter With Continuous Input Port Current and Continuous Output Port Current. *IEEE Transactions on Power Electronics*, **2018**, 33, 4157-4166	7.2	63
19	Systematic Derivation of Dead-Zone Elimination Strategies for the Noninverting Synchronous BuckBoost Converter. *IEEE Transactions on Power Electronics*, **2018**, 33, 3497-3508	7.2	15
18	A Y Hybrid Impedance Network Boost Converter With Reduced Input Current Ripple. *IEEE Transactions on Power Electronics*, **2018**, 33, 2803-2808	7.2	6
17	A critical topology review of power electronic transformers: In view of efficiency. *Chinese Journal of Electrical Engineering*, **2018**, 4, 90-95	4	10
16	An Investigation into Cascading Failure in Large-Scale Electric Grids: A Load-Redistribution Approach. *Applied Sciences (Switzerland)*, **2018**, 8, 1033	2.6	2
15	. *IEEE Access*, **2018**, 6, 44351-44361	3.5	5
14	3-Z-Network Boost Converter. *Studies in Systems, Decision and Control*, **2018**, 55-82	0.8	4
13	Z-source Half-Bridge Converter. *Studies in Systems, Decision and Control*, **2018**, 83-105	0.8	
12	Hybrid modulation method combining variable frequency and double phase-shift for a 10 kW LLC resonant converter. *IET Power Electronics*, **2018**, 11, 2161-2169	2.2	16

List of Publications

11	A Simplified Minimum DC-Link Voltage Control Strategy for Shunt Active Power Filters. *Energies*, **2018**, 11, 2407	3.1	4
10	A DSE-Based SMC Method of Sensorless DFIG Wind Turbines Connected to Power Grids for Energy Extraction and Power Quality Enhancement. *IEEE Access*, **2018**, 6, 76596-76605	3.5	9
9	A Five-Terminal Impedance Network Based Three-Port Converter. *IEEE Access*, **2018**, 6, 29474-29485	3.5	1
8	A Novel Single-Input Dual-Output Impedance Network Converter. *IEEE Journal of Emerging and Selected Topics in Power Electronics*, **2017**, 5, 1133-1141	5.6	6
7	An Impedance Network Boost Converter With a High-Voltage Gain. *IEEE Transactions on Power Electronics*, **2017**, 32, 6661-6665	7.2	37
6	Sneak Circuit Phenomena in a DCM Boost Converter Considering Parasitic Parameters. *IEEE Transactions on Power Electronics*, **2017**, 32, 3946-3958	7.2	15
5	High-performance quasi-Z-source inverter with low capacitor voltage stress and small inductance. *IET Power Electronics*, **2015**, 8, 1061-1067	2.2	20
4	A 3-Z-Network Boost Converter. *IEEE Transactions on Industrial Electronics*, **2015**, 62, 278-288	8.9	51
3	Cascading failures of power grids caused by line breakdown. *International Journal of Circuit Theory and Applications*, **2015**, 43, 1807-1814	2	10
2	A Z-Source Half-Bridge Converter. *IEEE Transactions on Industrial Electronics*, **2014**, 61, 1269-1279	8.9	37
1	Understanding the cascading failures in Indian power grids with complex networks theory. *Physica A: Statistical Mechanics and Its Applications*, **2013**, 392, 3273-3280	3.3	44