

Ayan Mallik

List of Publications by Year in descending order

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papers

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394421

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65
docs citations

65
times ranked

745
citing authors

#	ARTICLE	IF	CITATIONS
1	Bi-Directional CLLC Converter With Synchronous Rectification for Plug-In Electric Vehicles. IEEE Transactions on Industry Applications, 2018, 54, 998-1005.	4.9	123
2	Design of a 1-MHz High-Efficiency High-Power-Density Bidirectional GaN-Based CLLC Converter for Electric Vehicles. IEEE Transactions on Vehicular Technology, 2019, 68, 213-223.	6.3	96
3	Extended Harmonics Based Phase Tracking for Synchronous Rectification in CLLC Converters. IEEE Transactions on Industrial Electronics, 2019, 66, 6592-6603.	7.9	60
4	Control of a Three-Phase Boost PFC Converter Using a Single DC-Link Voltage Sensor. IEEE Transactions on Power Electronics, 2017, 32, 6481-6492.	7.9	50
5	Modeling and Optimization of an Integrated Transformer for Electric Vehicle On-Board Charger Applications. IEEE Transactions on Transportation Electrification, 2018, 4, 355-363.	7.8	47
6	Variable-Switching-Frequency State-Feedback Control of a Phase-Shifted Full-Bridge DC/DC Converter. IEEE Transactions on Power Electronics, 2017, 32, 6523-6531.	7.9	46
7	Sliding Mode Control of Single-Phase Interleaved Totem-Pole PFC for Electric Vehicle Onboard Chargers. IEEE Transactions on Vehicular Technology, 2018, 67, 8100-8109.	6.3	44
8	Input Voltage Sensorless Duty Compensation Control for a Three-Phase Boost PFC Converter. IEEE Transactions on Industry Applications, 2017, 53, 1527-1537.	4.9	41
9	A High Step-Down Isolated Three-Phase AC-DC Converter. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2018, 6, 129-139.	5.4	35
10	Sliding Mode Control Scheme for a CLLC Resonant Converter. IEEE Transactions on Power Electronics, 2019, 34, 12274-12284.	7.9	35
11	A Comprehensive Design and Optimization of the DM EMI Filter in a Boost PFC Converter. IEEE Transactions on Industry Applications, 2018, 54, 2023-2031.	4.9	34
12	A Comprehensive Design Approach to an EMI Filter for a 6-kW Three-Phase Boost Power Factor Correction Rectifier in Avionics Vehicular Systems. IEEE Transactions on Vehicular Technology, 2017, 66, 2942-2951.	6.3	33
13	A High Step-Down Dual Output Nonisolated DC/DC Converter With Decoupled Control. IEEE Transactions on Industry Applications, 2018, 54, 722-731.	4.9	31
14	Variable DC-Link Control Loop Design for an Integrated Two-Stage AC/DC Converter. IEEE Transactions on Transportation Electrification, 2018, 4, 99-107.	7.8	30
15	Multivariable-Modulation-Based Conduction Loss Minimization in a Triple-Active-Bridge Converter. IEEE Transactions on Power Electronics, 2022, 37, 6599-6612.	7.9	30
16	Cybersecurity of Onboard Charging Systems for Electric Vehicles—Review, Challenges and Countermeasures. IEEE Access, 2020, 8, 226982-226998.	4.2	29
17	Intermediate DC-Link Capacitor Reduction in a Two-Stage Cascaded AC/DC Converter for More Electric Aircrafts. IEEE Transactions on Vehicular Technology, 2018, 67, 935-947.	6.3	24
18	Maximum Efficiency Tracking of an Integrated Two-Stage AC-DC Converter Using Variable DC-Link Voltage. IEEE Transactions on Industrial Electronics, 2018, 65, 8408-8421.	7.9	23

#	ARTICLE	IF	CITATIONS
19	Dynamic Strategy for Efficiency Estimation in a CCM-Operated Front-End PFC Converter for Electric Vehicle Onboard Charger. IEEE Transactions on Transportation Electrification, 2017, 3, 545-553.	7.8	22
20	High-power-density high-efficiency LLC converter with an adjustable leakage inductance planar transformer for data centers. IET Power Electronics, 2019, 12, 303-310.	2.1	18
21	Comparative study of three-phase buck, boost and buck-boost rectifier topologies for regulated transformer rectifier units. , 2015, , .		17
22	Control of a single-stage three-phase boost power factor correction rectifier. , 2016, , .		17
23	An Integrated Control Strategy for a Fast Start-Up and Wide Range Input Frequency Operation of a Three-Phase Boost-Type PFC Converter for More Electric Aircraft. IEEE Transactions on Vehicular Technology, 2017, 66, 10841-10852.	6.3	16
24	3.3kW CLLC converter with synchronous rectification for plug-in electric vehicles. , 2017, , .		16
25	A Mathematical Design Approach to Volumetric Optimization of EMI Filter and Modeling of CM Noise Sources in a Three-Phase PFC. IEEE Transactions on Power Electronics, 2022, 37, 462-472.	7.9	13
26	Active Compensation-Based Harmonic Reduction Technique to Mitigate Power Quality Impacts of EV Charging Systems. IEEE Transactions on Transportation Electrification, 2023, 9, 1629-1640.	7.8	13
27	Notice of Removal: Reduced-State-Observer-Based Feedback Control System Design of a Two-Stage AC-DC Converter. IEEE Transactions on Industrial Electronics, 2017, 64, 6371-6382.	7.9	11
28	Notice of Removal: A Comparative Study Between PI and Type-II Compensators for H-Bridge PFC Converter. IEEE Transactions on Industry Applications, 2018, 54, 1128-1135.	4.9	11
29	Minimum inrush start-up control of a single-phase interleaved totem-pole PFC rectifier. , 2018, , .		9
30	A Novel Decoupled Control Scheme for Phase Controlled Triple Active Bridge. , 2021, , .		9
31	A high step-down dual output non-isolated DC/DC converter. , 2017, , .		8
32	Parameter-Variation-Tolerant Robust Current Sensorless Control of a Single-Phase Boost PFC. IEEE Journal of Emerging and Selected Topics in Industrial Electronics, 2022, 3, 933-945.	3.9	8
33	Duty compensated reduced harmonic control for a single-phase H-bridge PFC converter. , 2018, , .		7
34	Parametric Modeling and Characterization of Leakage-Integrated Planar Transformer for <i>CLLC</i> DC-DC Converter. IEEE Transactions on Magnetics, 2022, 58, 1-8.	2.1	7
35	Multi-variable Control-based Conduction Loss Optimization in Dual Active Bridge Converter Considering Generalized Harmonic Approximation Oriented Steady-State Model. , 2022, , .		7
36	DC link voltage sensorless control of a three-phase boost power factor correction rectifier. , 2016, , .		6

#	ARTICLE	IF	CITATIONS
37	A Comparative Study of Failure-Tolerant Three-phase RTRUs for More Electric Aircrafts. , 2019, , .		6
38	Optimisation of power electronics for regulated transformer rectifier units. IET Power Electronics, 2020, 13, 1002-1012.	2.1	6
39	System Modeling and Reliability Assessment of Microgrids: A Review. Sustainability, 2022, 14, 126.	3.2	6
40	Multi-variable Multi-constraint Optimization of Triple Active Bridge DC-DC Converter with Conduction Loss Minimization. , 2022, , .		6
41	A Comprehensive Review of EMI Filter Network Architectures: Synthesis, Optimization and Comparison. Electronics (Switzerland), 2021, 10, 1919.	3.1	5
42	Third harmonic compensation in a single-phase H-bridge PFC. , 2017, , .		4
43	Real Time Intelligent Data Processing Algorithm for Cyber Resilient Electric Vehicle Onboard Chargers. , 2021, , .		4
44	Three-loop Multi-variable Control of Triple Active Bridge Converter with Power Flow Optimization. , 2022, , .		4
45	State feedback based control of air-fuel-ratio using two wide-band oxygen sensors. , 2015, , .		3
46	A soft-switching strategy for three-phase boost power factor correction rectifiers. , 2016, , .		3
47	Response to Discussion on "A Comparative Study Between PI and Type-II Compensators for H-Bridge PFC Converter" IEEE Transactions on Industry Applications, 2018, 54, 4010-4010.	4.9	3
48	PWM Control of a High-Gain N-Phase Interleaved Current-Fed Topology. IEEE Transactions on Industrial Electronics, 2022, 69, 6461-6470.	7.9	3
49	Notice of Removal: A comparative study between PI and type-II compensators for H-bridge PFC converter. , 2017, , .		2
50	A systematic design procedure for a compact DM EMI filter for a 3-phase boost PFC rectifier. , 2017, , .		2
51	Modelling and Control of a Novel High Step-down 48V-1V DC-DC Converter. , 2021, , .		2
52	A Novel Hybrid Switching Scheme based Implementation of Shunt Active Power Filter. , 2020, , .		2
53	A Reduced Stage Configuration of Three-Phase Isolated AC/DC Converter for Auxiliary Power Units. IEEE Transactions on Vehicular Technology, 2022, 71, 3687-3703.	6.3	2
54	Extended Harmonic Analysis of Wireless Charging Systems. , 2018, , .		1

#	ARTICLE	IF	CITATIONS
55	Modelling and Control of a Reduced-Stage Isolated AC-DC Converter for More Electric Aircrafts. , 2021, , .		1
56	Artificial Neural Network based Direct Inverse Control for a Novel 48V-1V DC/DC Converter. , 2020, , .		1
57	Temperature Dependent Characterization-based Design Optimization of a DC-DC Converter for High-Temperature Applications. , 2022, , .		1
58	Quantification and Active Filtering-based Mitigation for Third Harmonic Component Attenuation in Totem-pole PFC for Onboard Charging Systems. , 2022, , .		1
59	Phase-Duty Modulated Loop Decoupling and Design Optimization for a Triple Active Bridge Converter for Light Electric Vehicle Charging. IEEE Journal of Emerging and Selected Topics in Industrial Electronics, 2023, 4, 357-367.	3.9	1
60	Multi-Objective Trade-Off Quantification Based Design Optimization for Power Electronic Systems in More-Electric-Aircrafts. IEEE Access, 2021, 9, 109558-109568.	4.2	0
61	High Gain Non-Isolated Current-fed Half-Bridge Partial Series Resonance Pulsed Based Zero Current Switching Voltage Quadrupler. , 2021, , .		0
62	A Comprehensive Design Procedure and Performance Evaluation of 200Å°C Non-Inverting Buck-Boost Converter using SiC MOSFET Bare Dies. , 2021, , .		0
63	A Novel Structure of Fully Soft-switched DC-DC Converter with Frequency Doubling Feature for High-Density Power Conversion. , 2021, , .		0
64	Discretized Sampling based Current Sensorless Control of Single-Phase Totem-pole Power Factor Corrector. , 2021, , .		0
65	Design and Fabrication of SiC based Stepper Motor Driver for High-Temperature Environments. , 2021, , .		0