Marco Liserre

List of Publications by Year
in descending order

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488	23,193	17440 63	12272 133
papers	citations	h-index	g-index

507	507	507	10406
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Unlocking the Hidden Capacity of the Electrical Grid Through Smart Transformer and Smart Transmission. Proceedings of the IEEE, 2023, 111, 421-437.	21.3	14
2	An Isolated SRC-Based Single Phase Single Stage Battery Charger for Electric Vehicles. IEEE Transactions on Transportation Electrification, 2023, 9, 1252-1262.	7.8	5
3	Capacitor Lifetime Extension of Interleaved DCâ€“DC Converters for Multistring PV Systems. IEEE Transactions on Industrial Electronics, 2023, 70, 4854-4864.	7.9	6
4	Reviewing Thermal-Monitoring Techniques for Smart Power Modules. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2022, 10, 1326-1341.	5.4	32
5	An MVDC-Based Meshed Hybrid Microgrid Enabled Using Smart Transformers. IEEE Transactions on Industrial Electronics, 2022, 69, 3722-3731.	7.9	16
6	Applications and Modulation Methods for Modular Converters Enabling Unequal Cell Power Sharing: Carrier Variable-Angle Phase-Displacement Modulation Methods. IEEE Industrial Electronics Magazine, 2022, 16, 19-30.	2.6	28
7	Predictive Control of Grid-Connected Modified-CHB With Reserve Batteries in Photovoltaic Application Under Asymmetric Operating Condition. IEEE Transactions on Industrial Electronics, 2022, 69, 9019-9028.	7.9	22
8	Harmonic Power-Flow Study of Polyphase Grids With Converter-Interfaced Distributed Energy Resourcesâ€”Part II: Model Library and Validation. IEEE Transactions on Smart Grid, 2022, 13, 470-481.	9.0	3
9	Modulation Strategies for Thermal Stress Control of CHB Inverters. IEEE Transactions on Power Electronics, 2022, 37, 3515-3527.	7.9	10
10	Soft-Unbalance Operation for Power Routing in Multiphase Drives. IEEE Transactions on Industry Applications, 2022, 58, 435-443.	4.9	1
11	Harmonic Power-Flow Study of Polyphase Grids With Converter-Interfaced Distributed Energy Resourcesâ€”Part I: Modeling Framework and Algorithm. IEEE Transactions on Smart Grid, 2022, 13, 458-469.	9.0	12
12	Flexible Active Power Control of Distributed Photovoltaic Systems With Integrated Battery Using Series Converter Configurations. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2022, 10, 6891-6909.	5.4	7
13	Nonlinear Modular State-Space Modeling of Power-Electronics-Based Power Systems. IEEE Transactions on Power Electronics, 2022, 37, 6102-6115.	7.9	15
14	Voltage-Fed Isolated Matrix-Type AC/DC Converter for Wind Energy Conversion System. IEEE Transactions on Industrial Electronics, 2022, 69, 13056-13068.	7.9	11
15	A General and Automatic RMS Current Oriented Optimal Design Tool for LLC Resonant Converters. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2022, 10, 7318-7332.	5.4	8
16	Efficiency Optimization Scheme for Isolated Triple Active Bridge DCâ€“DC Converter With Full Soft-Switching and Minimized RMS Current. IEEE Transactions on Power Electronics, 2022, 37, 9114-9128.	7.9	27
17	Analysis, Limitations, and Opportunities of Modular Multilevel Converter-Based Architectures in Fast Charging Stations Infrastructures. IEEE Transactions on Power Electronics, 2022, 37, 10747-10760.	7.9	22
18	RMS Current based Automated Optimal Design Tool for LLC Resonant Converters. , 2022, , .		3

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19	Multiport Resonant DC-DC Converter using Actively-Controlled Inductors for Hybrid Energy Storage System Integration. , 2022, , .		4
20	Space Vector Modulation Technique for Reducing Harmonics in Current with Zero Common-Mode Voltage for Two-Parallel Three-Level Converters. , 2022, , .		0
21	Modeling and Control of a Two-Bus System With Grid-Forming and Grid-Following Converters. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2022, 10, 7133-7149.	5.4	17
22	Decoupling Analysis and Modeling for Three-port Resonant Converter. , 2022, , .		0
23	Primary Frequency Regulation Using HVDC Terminals Controlling Voltage Dependent Loads. IEEE Transactions on Power Delivery, 2021, 36, 710-720.	4.3	15
24	Neutral Current Optimization Control for Smart Transformer-Fed Distribution System Under Unbalanced Loads. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2021, 9, 1696-1707.	5.4	11
25	Smart Transformer-Enabled Meshed Hybrid Distribution Grid. IEEE Transactions on Industrial Electronics, 2021, 68, 282-292.	7.9	52
26	Crossing Thyristor Branches-Based Hybrid Modular Multilevel Converters for DC Line Faults. IEEE Transactions on Industrial Electronics, 2021, 68, 9719-9730.	7.9	37
27	A Reduced Power Switches Count Multilevel Converter-Based Photovoltaic System With Integrated Energy Storage. IEEE Transactions on Industrial Electronics, 2021, 68, 8231-8240.	7.9	14
28	Extended Operation Range of Photovoltaic Inverters by Current Waveform Shaping. IEEE Transactions on Power Electronics, 2021, 36, 1693-1707.	7.9	0
29	Impact of smart transformer voltage and frequency support in a high renewable penetration system. Electric Power Systems Research, 2021, 190, 106836.	3.6	21
30	Switch Open-Circuit Fault Localization Strategy for MMCs Using Sliding-Time Window Based Features Extraction Algorithm. IEEE Transactions on Industrial Electronics, 2021, 68, 10193-10206.	7.9	27
31	Discontinuous-PWM Method for Multilevel N-Cell Cascaded H-Bridge Converters. IEEE Transactions on Industrial Electronics, 2021, 68, 7996-8005.	7.9	14
32	Research on Active Thermal Control: Actual Status and Future Trends. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2021, 9, 6494-6506.	5.4	28
33	FS-MPC Based Thermal Stress Balancing and Reliability Analysis for NPC Converters. IEEE Open Journal of Power Electronics, 2021, 2, 124-137.	5.7	19
34	DC-Link Voltage Balancing Modulation for Cascaded H-Bridge Converters. IEEE Access, 2021, 9, 103524-103532.	4.2	7
35	Common-Mode Voltage Mitigation of Dual Three-Phase Voltage Source Inverters in a Motor Drive Application. IEEE Access, 2021, 9, 67477-67487.	4.2	16
36	Common-Mode Voltage Mitigation Technique in Motor Drive Applications by Applying a Sampling-Time Adaptive Multi-Carrier PWM Method. IEEE Access, 2021, 9, 56115-56126.	4.2	10

#	Article	IF	Citations
37	Flexible Control Structure of a Smart Transformer for Universal Operation. , 2021, , .		0
38	Operation and Control of the Smart Transformer in Meshed and Hybrid Grids: Choosing the Appropriate Smart Transformer Control and Operation Scheme. IEEE Industrial Electronics Magazine, 2021, 15, 43-57.	2.6	21
39	Common-Mode Voltage Harmonic Reduction in Variable Speed Drives Applying a Variable-Angle Carrier Phase-Displacement PWM Method. Energies, 2021, 14, 2929.	3.1	0
40	Grid-Forming Control of Smart Solid-State Transformer in Meshed Network. , 2021, , .		3
41	Multiwinding-Transformer-Based dc-dc Converter Solutions for Charging Stations [Technology Leaders]. IEEE Electrification Magazine, 2021, 9, 5-9.	1.8	6
42	Evaluation of carrier-based control strategies for balancing the thermal stress of a hybrid SiC ANPC converter. , 2021, , .		8
43	Reliability of Silicon Battery Technology and Power Electronics Based Energy Conversion. IEEE Power Electronics Magazine, 2021, 8, 60-69.	0.7	3
44	Synchronization of Low Voltage Grids Fed by Smart and Conventional Transformers. IEEE Transactions on Smart Grid, 2021, 12, 2941-2951.	9.0	6
45	Multiwinding Transformer Leakage Inductance Optimization for Power Flow Decoupling in Multiport DC-DC Converters. , 2021, , .		7
46	Passive Clamping Circuit for Reduced Switch Count in Solid State Circuit Breakers. , 2021, , .		0
47	Interactions Between Two Phase-Locked Loop Synchronized Grid Converters. IEEE Transactions on Industry Applications, 2021, 57, 3935-3947.	4.9	16
48	Analysis and Suppression of Zero-Sequence Circulating Current in Multi-Parallel Converters. , 2021, , .		3
49	Selective Soft-Switching for Thermal Balancing in IGBT-Based Multichip Systems. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2021, 9, 3982-3991.	5.4	5
50	Voltage-Dependent Load-Leveling Approach by Means of Electric Vehicle Fast Charging Stations. IEEE Transactions on Transportation Electrification, 2021, 7, 1099-1111.	7.8	7
51	Modulation for Cascaded Multilevel Converters in PV Applications With High Input Power Imbalance. IEEE Transactions on Power Electronics, 2021, 36, 10866-10878.	7.9	19
52	On The Implementation of an FRT Strategy for Grid-Forming Converters Under Symmetrical and Asymmetrical Grid Faults. IEEE Transactions on Industry Applications, 2021, 57, 4385-4397.	4.9	37
53	A Comprehensive Assessment of Multiwinding Transformer-Based DCâ€“DC Converters. IEEE Transactions on Power Electronics, 2021, 36, 10020-10036.	7.9	40
54	Reduction of the Circulating Current Among Parallel NPC Inverters. IEEE Transactions on Power Electronics, 2021, 36, 12504-12514.	7.9	24

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55	The Role of Renewable Energy System in Reshaping the Electrical Grid Scenario. IEEE Open Journal of the Industrial Electronics Society, 2021, 2, 451-468.	6.8	21
56	Grid-Forming Converters: Control Approaches, Grid-Synchronization, and Future Trendsâ€"A Review. IEEE Open Journal of Industry Applications, 2021, 2, 93-109.	6.5	345
57	Channel Coding and Receiver Design for Simultaneous Wireline Information and Power Transfer. IEEE Open Journal of Power Electronics, 2021, 2, 545-558.	5.7	8
58	Impact of Optimal Control of Distributed Generation Converters in Smart Transformer Based Meshed Hybrid Distribution Network. IEEE Access, 2021, 9, 140268-140280.	4.2	8
59	Two-Stage Modulation Study for DAB Converter. Electronics (Switzerland), 2021, 10, 2561.	3.1	1
60	Potentials and Challenges of Multiwinding Transformer-Based DC-DC Converters for Solid-State Transformer. , 2021, , .		3
61	Enhanced Current-Type P-HIL Interface Algorithm for Smart Transformers Testing. , 2021, , .		6
62	On the Analysis of Quasi-Discontinuous Modulations for Dual-Active-Bridge. , 2021, , .		0
63	Performance Evaluation of the Multi-winding Redundancy Approach in MTB DC-DC Converters. , 2021, , .		1
64	Quasi-Reference PWM for 3-level Voltage Source Inverters. , 2021, , .		2
65	Iron Losses Impact on High-Speed Drives. , 2021, , .		1
66	Impact of Partial Power Processing Dual-Active Bridge Converter on Li-ion Battery Storage Systems. , 2021, , .		0
67	Zero-sequence Circulating Current Suppression with Stand-alone Feedforward Control for Power Hardware-in-the-Loop System. , 2021, , .		2
68	Design Oriented Analysis of Control Loops Interaction in Power Synchronization-based Voltage Source Converter. , 2021, , .		2
69	Analysis of Overmodulation in Power Synchronization-based Voltage Source Converters. , 2021, , .		1
70	Primary Frequency Regulation using HVDC terminals controlling Voltage Dependent Loads. , 2021, , .		1
71	AC/DC Converter based on Dual Active Bridge with Reactive Power Management. , 2021, , .		0
72	Stability Enhancement for Single-Loop Voltage Controlled Voltage-Source Converters with LC-Filter. , 2021, , .		0

#	Article	IF	Citations
73	Impact of Grid Forming Power Converters on the Provision of Grid Services through VSC-HVdc Systems. , 2021, , .		1
74	Mission-Profile Based Design of a Hybrid-Grids Feeding Smart Transformer. , 2021, , .		3
75	Architecture and Topology Overview of Modular Smart Solid-State Transformer. , 2021, , .		0
76	Analysis of Voltage Control Strategies for Wind Farms. IEEE Transactions on Sustainable Energy, 2020, 11, 1002-1012.	8.8	30
77	Sampling-Time Harmonic Control for Cascaded H-Bridge Converters With Thermal Control. IEEE Transactions on Industrial Electronics, 2020, 67, 2776-2785.	7.9	19
78	Thermally Compensated Discontinuous Modulation for MVAC/LVDC Building Blocks of Modular Smart Transformers. IEEE Transactions on Power Electronics, 2020, 35, 220-231.	7.9	16
79	Fault Localization Strategy for Modular Multilevel Converters Under Submodule Lower Switch Open-Circuit Fault. IEEE Transactions on Power Electronics, 2020, 35, 5190-5204.	7.9	46
80	Design Consideration of a Dual-Functional Bridge-Type Fault Current Limiter. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2020, 8, 3825-3834.	5.4	16
81	Advanced Discontinuous Modulation for Thermally Compensated Modular Smart Transformers. IEEE Transactions on Power Electronics, 2020, 35, 2445-2457.	7.9	16
82	Thermal Stress Based Power Routing of Smart Transformer With CHB and DAB Converters. IEEE Transactions on Power Electronics, 2020, 35, 4205-4215.	7.9	25
83	DC Fault Current Blocking With the Coordination of Half-Bridge MMC and the Hybrid DC Breaker. IEEE Transactions on Industrial Electronics, 2020, 67, 5503-5514.	7.9	27
84	Microgrid Stability Definitions, Analysis, and Examples. IEEE Transactions on Power Systems, 2020, 35, 13-29.	6.5	422
85	A Thermal Modeling Method Considering Ambient Temperature Dynamics. IEEE Transactions on Power Electronics, 2020, 35, 6-9.	7.9	23
86	Modeling of the Phase Detector of a Synchronous-Reference-Frame Phase-Locked Loop Based on Second-Order Approximation. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2020, 8, 2534-2545.	5.4	17
87	Control of Smart Transformer Under Single-Phase to Ground Fault Condition. IEEE Transactions on Power Electronics, 2020, 35, 2034-2043.	7.9	8
88	Modeling Phase-Locked Loop-Based Synchronization in Grid-Interfaced Converters. IEEE Transactions on Energy Conversion, 2020, 35, 394-404.	5.2	43
89	Peak Current Control and Feed-Forward Compensation of a DAB Converter. IEEE Transactions on Industrial Electronics, 2020, 67, 8381-8391.	7.9	27
90	Graph-Theory-Based Modeling and Control for System-Level Optimization of Smart Transformers. IEEE Transactions on Industrial Electronics, 2020, 67, 8910-8920.	7.9	11

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91	Robust Stability Investigation of the Interactions Among Grid-Forming and Grid-Following Converters. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2020, 8, 991-1003.	5.4	52
92	Finite Control Set Model Predictive Control for LCL-Filtered Grid-Tied Inverter With Minimum Sensors. IEEE Transactions on Industrial Electronics, 2020, 67, 9980-9990.	7.9	76
93	Asymmetrical Bidirectional DCâ€“DC Converter With Limited Reverse Power Rating in Smart Transformer. IEEE Transactions on Power Electronics, 2020, 35, 6895-6905.	7.9	13
94	Output Impedance Modeling and High-Frequency Impedance Shaping Method for Distributed Bidirectional DCâ€“DC Converters in DC Microgrids. IEEE Transactions on Power Electronics, 2020, 35, 7001-7014.	7.9	18
95	Protection and Management of Internal Faults in Modular Smart Transformer. , 2020, , .		4
96	Multiwinding based Semi-Dual Active Bridge Converter. , 2020, , .		6
97	Modular Hybrid DC Breaker-based Adaptive Auto-Reclosing Method for MMC-HVDC Systems. , 2020, , .		6
98	Investigation of Modular Multilevel Converters for E-STATCOM Applications. , 2020, , .		2
99	Pulse-Shadowing Based Thermal Balancing in Multichip Modules. IEEE Transactions on Industry Applications, 2020, , 1-1.	4.9	7
100	Generalized Harmonic Control for CHB Converters With Unbalanced Cells Operation. IEEE Transactions on Industrial Electronics, 2020, 67, 9039-9047.	7.9	29
101	Enhanced grid frequency support by means of HVDC-based load control. Electric Power Systems Research, 2020, 189, 106552.	3.6	6
102	Fundamentals of power systems modelling in the presence of converter-interfaced generation. Electric Power Systems Research, 2020, 189, 106811.	3.6	107
103	Power Routing: A New Paradigm for Maintenance Scheduling. IEEE Industrial Electronics Magazine, 2020, 14, 33-45.	2.6	41
104	Stability Assessment of Voltage Control Strategies for Smart Transformer-Fed Distribution Grid. IEEE Access, 2020, 8, 185146-185157.	4.2	4
105	Power Devices Aging Equalization of Interleaved DCâ€“DC Boost Converters via Power Routing. IEEE Journal of Emerging and Selected Topics in Industrial Electronics, 2020, 1, 91-101.	3.9	10
106	Current Limitation Strategy For Grid-Forming Converters Under Symmetrical And Asymmetrical Grid Faults. , 2020, , .		17
107	Modeling and Stability Analysis of a Smart Transformer-Fed Grid. IEEE Access, 2020, 8, 91876-91885.	4.2	5
108	Hysteresis Model Predictive Current Control for PMSM With LC Filter Considering Different Error Shapes. IEEE Open Journal of Power Electronics, 2020, 1, 190-197.	5.7	14

#	Article	IF	Citations
109	Cascaded Multilevel PV Inverter With Improved Harmonic Performance During Power Imbalance Between Power Cells. IEEE Transactions on Industry Applications, 2020, 56, 2788-2798.	4.9	25
110	Guest Editorial: Modeling and Simulation Methods for Analysis and Design of Advanced Energy Conversion Systems. IEEE Transactions on Energy Conversion, 2020, 35, 309-311.	5.2	0
111	Optimal Design of Planar Transformer for GaN based Phase-Shifted Full Bridge Converter. , 2020, , .		10
112	Real-Time Simulation-Based Testing of Modern Energy Systems: A Review and Discussion. IEEE Industrial Electronics Magazine, 2020, 14, 28-39.	2.6	42
113	Soft-Start Procedure for a Three-Stage Smart Transformer Based on Dual-Active Bridge and Cascaded H-Bridge Converters. IEEE Transactions on Power Electronics, 2020, 35, 11039-11052.	7.9	38
114	Load-Dependent Active Thermal Control of Grid-Forming Converters. IEEE Transactions on Industry Applications, 2020, 56, 2078-2086.	4.9	4
115	Design of PWM-SMC Controller Using Linearized Model for Grid-Connected Inverter With LCL Filter. IEEE Transactions on Power Electronics, 2020, 35, 12773-12786.	7.9	39
116	Vf â€constrained Îİ â€pareto optimisation of medium frequency transformers in ISOPâ€ĐAB converters. IET Power Electronics, 2020, 13, 1984-1994.	2.1	5
117	Design Approach of Inductive Components in Medium Voltage Modular Multilevel Converter Considering DC Side Fault Protection Conditions. , 2020, , .		2
118	Isolated DC/DC Multimode Converter with Energy Storage Integration for Charging Stations. , 2020, , .		6
119	Grid-forming converters: an overview of control approaches and future trends. , 2020, , .		42
120	Smart transformer/large flexible transformer. CES Transactions on Electrical Machines and Systems, 2020, 4, 264-274.	3.5	27
121	Smart transformer-based medium voltage grid support by means of active power control. CES Transactions on Electrical Machines and Systems, 2020, 4, 285-294.	3.5	23
122	Optimization of EV-Fast Charging Station Placement for Grid Support. IFAC-PapersOnLine, 2020, 53, 13769-13774.	0.9	1
123	Guest Editorial: Special Section on Modeling, Topology, and Control of Grid-Forming Inverters. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2020, 8, 923-924.	5.4	2
124	Real-Time Primary Frequency Regulation Using Load Power Control by Smart Transformers. , 2020, , .		1
125	Modelling and Performance Evaluation of Smart Transformer in Distribution Grids. , 2020, , .		2
126	Management and Control of Smart Transformer-Fed LV Distribution Networks During Grid Faults. Lecture Notes in Electrical Engineering, 2020, , 267-277.	0.4	2

#	Article	IF	Citations
127	Operation and Supervision Control in Smart Transformer-based Meshed and Hybrid Grids. , 2020, , .		3
128	Future MVDC Applications Using Modular Multilevel Converter. , 2020, , .		8
129	Positive-Negative Sequence SRF-PLL Model for Accurate Stability Analysis in Grid-Tied Converters. , 2020, , .		5
130	Minimizing Losses Induced by Parasitic Winding Capacitance in Electric Drives by Means of Soft-Switching GaN-Based ARCP. , 2020, , .		4
131	State-feedback-based Low-Frequency Active Damping for VSC Operating in Weak-Grid Conditions. , 2020, , .		6
132	Power Loss Minimization in Smart Transformer Based Meshed Hybrid Distribution Network. , 2020, , .		7
133	Modular Smart Transformer Topology for the Interconnection of Multiple Isolated AC and DC Grids. , 2020, , .		7
134	Scalable State-Space Model of Voltage Source Converter for Low-Frequency Stability Analysis. , 2020, , .		5
135	Indirect Front-End Smart Transformer with Reactive Power Management. , 2020, , .		2
136	Impedance-based Stability Assessment of Self-Synchronising Power Electronics Converter. , 2020, , .		2
137	Phase Angle Compensation-based Highly Accurate Self-Synchronising Inverter. , 2020, , .		1
138	Grid Identification and Adaptive Voltage Control in a Smart Transformer-Fed Grid. IEEE Transactions on Power Electronics, 2019, 34, 2327-2338.	7.9	25
139	A New Voltage Balancing Technique for a Three-Stage Modular Smart Transformer Interfacing a DC Multibus. IEEE Transactions on Power Electronics, 2019, 34, 2829-2840.	7.9	35
140	Robust Stability Analysis of LCL Filter Based Synchronverter Under Different Grid Conditions. IEEE Transactions on Power Electronics, 2019, 34, 5842-5853.	7.9	55
141	Load Control for the DC Electrical Power Distribution System of the More Electric Aircraft. IEEE Transactions on Power Electronics, 2019, 34, 3937-3947.	7.9	39
142	Dahlin-Based Fast and Robust Current Control of a PMSM in Case of Low Carrier Ratio. IEEE Access, 2019, 7, 102199-102208.	4.2	17
143	Solid State Transformer with Integrated Input Stage. , 2019, , .		1
144	Enhanced Current Capability for Modular Multilevel Converters by a Combined Sorting Algorithm for Capacitor Voltages and Semiconductor Losses. , 2019, , .		3

#	Article	IF	Citations
145	Which Deepness Class Is Suited for Modeling Power Electronics?: A Guide for Choosing the Right Model for Grid-Integration Studies. IEEE Industrial Electronics Magazine, 2019, 13, 41-55.	2.6	28
146	Operations and Coordination of Dual-Functional DVR and Recloser in a Power Distribution System. IEEE Access, 2019, 7, 140908-140921.	4.2	6
147	Coordination of Dual-functional Dynamic Voltage Restorer and Recloser in Power Distribution System. , 2019, , .		0
148	Smart Transformer-based Frequency Support in Variable Inertia Conditions. , 2019, , .		1
149	Theoretical Evaluation of Semiconductor Loss Components Behavior in ISOP-DAB Converters. , 2019, , .		1
150	Frequency-Domain Electrothermal Impedance Spectroscopy of an Actively Switching Power Semiconductor Converter. IEEE Transactions on Industry Applications, 2019, 55, 6161-6172.	4.9	15
151	Comparison of Finite Control Set and Hysteresis Based Model Predictive Control for NPC and T-Type Converter in case of low carrier ratio. , 2019, , .		1
152	Peak Current Control and Feed-Forward Compensation for the DAB Converter. , 2019, , .		5
153	Smart Transformer requirements for integration in distribution grids and power quality improvement. , 2019, , .		0
154	Assessment of Efficiency and Reliability of Wide Band-Gap Based H8 Inverter in Electric Vehicle Applications. Energies, 2019, 12, 1922.	3.1	17
155	Distributed Online Load Sensitivity Identification by Smart Transformer and Industrial Metering. IEEE Transactions on Industry Applications, 2019, 55, 7328-7337.	4.9	14
156	Transient-Immune GaN Gate Driver and Power Layout. , 2019, , .		0
157	Two-stage Input-Output Feedback linearization controller for AC-AC converter-based SST. , 2019, , .		2
158	Comparative Study of Heatsink Volume and Weight Optimization in SST DAB cells Employing GaN, SiC-MOSFET and Si-IGBT Switches. , 2019, , .		7
159	Volume Optimization in Si IGBT based Dual-Active-Bridge Converters. , 2019, , .		1
160	Analysis of the Interaction Among Power Converters Through Their Synchronization Mechanism. IEEE Transactions on Power Electronics, 2019, 34, 12321-12332.	7.9	39
161	Guest Editorial Joint Special Section on Power Conversion & Control in Photovoltaic Power Plants. IEEE Transactions on Energy Conversion, 2019, 34, 159-160.	5.2	1
162	On-Board Microgrids for the More Electric Aircraft. IEEE Transactions on Industrial Electronics, 2019, 66, 5585-5587.	7.9	10

#	Article	IF	Citations
163	Robust Stability Analysis of Synchronverters Operating in Parallel. IEEE Transactions on Power Electronics, 2019, 34, 11309-11319.	7.9	72
164	Smart Transformer-Based Single Phase-To-Neutral Fault Management. IEEE Transactions on Power Delivery, 2019, 34, 1049-1059.	4.3	11
165	Fault Tolerance in Multiple-Active Bridge Converters Applied in Smart Transformers. , 2019, , .		0
166	Integration and Optimization of Voltage Active Filtering Functionality in a PV Park. , 2019, , .		1
167	High Performances Voltage Control of Bidirectional-Asymmetrical DC/DC Converter in Smart Transformer for Limited Reverse Power Flow. , 2019, , .		0
168	Online Load Control in Medium Voltage Grid by Means of Reactive Power Modification of Fast Charging Station. , 2019, , .		4
169	Double Active Bridge Operated in Quasi Discontinuous Conduction Mode. , 2019, , .		2
170	High-Efficiency Solid State Transformer Architecture for Large-scale PV Application. , 2019, , .		7
171	Current Harmonic Reduction of DC-Link Capacitor in Dual Motor Drive System. , 2019, , .		0
172	Cascaded Multilevel Topology Based on Quadruple Active Bridges for Phase Power Balancing in Large-scale PV Systems. , 2019, , .		3
173	Frequency support provision by parallel, hybrid HVDC-HVAC system with Voltage-based Load Control. , 2019, , .		2
174	Optimal Design of a Medium-Voltage Grid Analyzer. , 2019, , .		0
175	High-quality Output Voltage of Multilevel Cascaded H-bridge Converters with Large Number of Cells with Unequal DC Voltages. , 2019, , .		3
176	Estimation and Interruption of Short Circuit Currents in HVDC Systems. , 2019, , .		1
177	Mitigation of Disturbances by Means of Smart Transformer-based Storage Systems. , 2019, , .		0
178	Comparison of Modulation Methods to Reduce the Circulating Current in Paralleled NPC-Converters with Common DC-link. , 2019, , .		2
179	Mixed Technology Modular Multilevel Converter Cell - A Cost/Efficiency Analysis. , 2019, , .		3
180	Interactions Between Phase-locked Loop Synchronized Grid Converters With Different Bandwidths and Power Ratings. , 2019, , .		1

#	Article	IF	Citations
181	High-Frequency Harmonic Current Control of Power Converters. , 2019, , .		4
182	Overload Operation of LV-Side Inverter in Smart Transformer. , 2019, , .		4
183	Discontinuous Modulation of Interleaved Parallel NPC Inverters with Reduced Circulating Current. , 2019, , .		5
184	Hybrid Multiple-Active Bridge for Unequal Power Flow in Smart Transformers. , 2019, , .		2
185	Isolated Multiport Converter as Cost Efficient Solution for DC-Fast Charger of Electric Vehicle. , 2019, , .		4
186	Lifetime Estimation of DC-Link Electrolytic Capacitor for Smart Transformer LV Side Inverter. , 2019, , .		3
187	Power Routing to Enhance the Lifetime of Multiphase Drives. , 2019, , .		5
188	Analysis of the Parallel Operation Between Synchronverters and PLL-Based Converters. , 2019, , .		5
189	FS-MPC Algorithm for Optimized Operation of a Hybrid Active Neutral Point Clamped Converter. , 2019, , .		6
190	Control Strategies for Losses Optimization in Modular Multilevel Converter. , 2019, , .		1
191	Flexibility options identification within Net Zero Energy Factories. , 2019, , .		11
192	Improved Harmonic Performance of Cascaded H-Bridge Converters With Thermal Control. IEEE Transactions on Industrial Electronics, 2019, 66, 4982-4991.	7.9	26
193	Real-Time Primary Frequency Regulation Using Load Power Control by Smart Transformers. IEEE Transactions on Smart Grid, 2019, 10, 5630-5639.	9.0	46
194	Fault Current Estimation in Multi-Terminal HVdc Grids Considering MMC Control. IEEE Transactions on Power Systems, 2019, 34, 2179-2189.	6.5	59
195	Improving Onboard Converter Reliability for More Electric Aircraft With Lifetime-Based Control. IEEE Transactions on Industrial Electronics, 2019, 66, 5787-5796.	7.9	58
196	On-Board Microgrids for the More Electric Aircraftâ€"Technology Review. IEEE Transactions on Industrial Electronics, 2019, 66, 5588-5599.	7.9	169
197	Cascaded Multilevel Converter Topology for Large-Scale Photovoltaic System With Balanced Operation. IEEE Transactions on Industrial Electronics, 2019, 66, 7694-7705.	7.9	62
198	Multi-port DC/DC converter for the electrical power distribution system of the more electric aircraft. Mathematics and Computers in Simulation, 2019, 158, 387-402.	4.4	13

#	Article	IF	Citations
199	Comparative Analysis of Multiple Active Bridge Converters Configurations in Modular Smart Transformer. IEEE Transactions on Industrial Electronics, 2019, 66, 191-202.	7.9	63
200	Discontinuous-Modulation-Based Active Thermal Control of Power Electronic Modules in Wind Farms. IEEE Transactions on Power Electronics, 2019, 34, 301-310.	7.9	42
201	Control of Smart Transformer in Different Electric Grid Configurations. , 2019, , .		3
202	Thermal Stress Based Model Predictive Control of Electric Drives. IEEE Transactions on Industry Applications, 2018, 54, 1513-1522.	4.9	43
203	Concurrent Voltage Control and Dispatch of Active Distribution Networks by Means of Smart Transformer and Storage. IEEE Transactions on Industrial Electronics, 2018, 65, 6657-6666.	7.9	46
204	Interleaved Operation of Two Neutral-Point-Clamped Inverters With Reduced Circulating Current. IEEE Transactions on Power Electronics, 2018, 33, 10122-10134.	7.9	40
205	Multifrequency Single-Phase Islanded Grids. IEEE Transactions on Industrial Electronics, 2018, 65, 9528-9538.	7.9	9
206	Sizing and SOC Management of a Smart-Transformer-Based Energy Storage System. IEEE Transactions on Industrial Electronics, 2018, 65, 6709-6718.	7.9	59
207	Robust Active Damping in LCL-Filter-Based Medium-Voltage Parallel Grid Inverters for Wind Turbines. IEEE Transactions on Power Electronics, 2018, 33, 10846-10857.	7.9	24
208	Optimum Design of a Multiple-Active-Bridge DCâ€“DC Converter for Smart Transformer. IEEE Transactions on Power Electronics, 2018, 33, 10112-10121.	7.9	62
209	A PV-Inspired Low-Common-Mode Dual-Active-Bridge Converter for Aerospace Applications. IEEE Transactions on Power Electronics, 2018, 33, 10467-10477.	7.9	42
210	A Family of Series-Resonant DCâ€“DC Converter With Fault-Tolerance Capability. IEEE Transactions on Industry Applications, 2018, 54, 335-344.	4.9	37
211	New Technique Trends for Power Converters in Distributed Power Generation Systems: Part II. IEEE Transactions on Industrial Electronics, 2018, 65, 673-675.	7.9	1
212	Current-type Power Hardware in the Loop (PHIL) evaluation for smart transformer application. , 2018, , .		8
213	Smart transformer universal operation. , 2018, , .		11
214	Lifetime-based power routing of smart transformer with CHB and DAB converters. , 2018, , .		10
215	Passivity-Based Control of Switched Reluctance-Based Wind System Supplying Constant Power Load. IEEE Transactions on Industrial Electronics, 2018, 65, 9550-9560.	7.9	60
216	Active Thermal Control of GaN-Based DC/DC Converter. IEEE Transactions on Industry Applications, 2018, 54, 3529-3540.	4.9	29

#	Article	IF	Citations
217	Load Control Using Sensitivity Identification by Means of Smart Transformer. IEEE Transactions on Smart Grid, 2018, 9, 2606-2615.	9.0	75
218	Thermally Compensated Discontinuous Modulation Strategy for Cascaded H-Bridge Converters. IEEE Transactions on Power Electronics, 2018, 33, 2704-2713.	7.9	46
219	Reverse Power Flow Control in a ST-Fed Distribution Grid. IEEE Transactions on Smart Grid, 2018, 9, 3811-3819.	9.0	77
220	Smart Transformer-Fed Variable Frequency Distribution Grid. IEEE Transactions on Industrial Electronics, 2018, 65, 749-759.	7.9	34
221	Junction Temperature Control for More Reliable Power Electronics. IEEE Transactions on Power Electronics, 2018, 33, 765-776.	7.9	228
222	Thermal Analysis and Balancing for Modular Multilevel Converters in HVDC Applications. IEEE Transactions on Power Electronics, 2018, 33, 1985-1996.	7.9	86
223	Analysis of DC-Link Current Influence on Temperature Variation of Capacitor in a Wind Turbine Application. IEEE Transactions on Power Electronics, 2018, 33, 3441-3451.	7.9	21
224	Lifetime-Based Power Routing in Parallel Converters for Smart Transformer Application. IEEE Transactions on Industrial Electronics, 2018, 65, 1675-1684.	7.9	39
225	Performance Comparison of Variable-Angle Phase-Shifting Carrier PWM Techniques. IEEE Transactions on Industrial Electronics, 2018, 65, 5272-5281.	7.9	22
226	A Quadruple Active Bridge Converter for the Storage Integration on the More Electric Aircraft. IEEE Transactions on Power Electronics, 2018, 33, 8174-8186.	7.9	79
227	Analysis and Stabilization of a Smart Transformer-Fed Grid. IEEE Transactions on Industrial Electronics, 2018, 65, 1325-1335.	7.9	32
228	Study of Phase-Locked-Loop-Based Synchronization of Grid Inverter During Large Phase Jump. , 2018, , .		6
229	Active Thermal Control of Asynchronously-Connected Grids Considering Load Sensitivity to Voltage. , 2018, , .		2
230	Parameter Sensitivity Analysis of SPC-based Control Under Different Grid Conditions. , 2018, , .		4
231	Optimal trade-off between hard and soft-switching to achieve energy saving in industrial electric vehicles. , 2018, , .		4
232	Multiphysics Modelling of Asynchronously-Connected Grids. , 2018, , .		2
233	High-Frequency Grid Current Control of Parallel Inverters. , 2018, , .		3
234	A Generalized Formulation of Active Power Synchronization Based Control Algorithms for Grid Connected Converters. , 2018, , .		6

#	Article	IF	Citations
235	Simultaneous Wireless Information and GaN-Based Power Transfer Exploiting a Dual Frequency Band. , 2018, , .		0
236	Experimentally Extracting Multiple Spatial Thermal Models that Accurately Capture Slow and Fast Properties of Assembled Power Semiconductor Converter Systems. , 2018, , .		7
237	Continuous Operation of Smart Transformer-fed Distribution Grid with Single-phase Faults. , 2018, , .		4
238	Analysis of the Behavior of Synchronverters Operating in Parallel by Means of Component Connection Method (CCM). , 2018, , .		7
239	Smart Transformer Based Loop Power Controller in Radial Power Distribution Grid. , 2018, , .		7
240	Smart Transformer and Low Frequency Transformer Comparison on Power Delivery Characteristics in the Power System. , 2018, , .		11
241	Multi-Step Model Predictive Control for a High-Speed Medium-Power PMSM. , 2018, , .		4
242	Failure Analysis of the dc-dc Converter: A Comprehensive Survey of Faults and Solutions for Improving Reliability. IEEE Power Electronics Magazine, 2018, 5, 42-51.	0.7	72
243	Sensitivity Analysis for the DC Electrical Power Distribution System of the More Electric Aircraft. , 2018, , .		0
244	Flexible Power Transfer in Smart Transformer Interconnected Microgrids. , 2018, , .		5
245	Robustness Analysis of Voltage Control Strategies of Smart Transformer. , 2018, , .		7
246	High Power Quality Voltage Control of Smart Transformer-Fed Distribution Grid. , 2018, , .		9
247	Phase Power Balancing of Interphase Grid-Connected CHB-QAB PV Systems. , 2018, , .		7
248	CHB Converter DC Voltage Control Based on Feedback Linearization. , 2018, , .		1
249	Zero-Sequence Injection Technique for Capacitor Lifetime Extension on the Low-Voltage Converter of a Smart Transformer. , 2018, , .		0
250	Overcoming design challenges in low voltage GaN based PSFB battery charger. , 2018, , .		3
251	Modular EV Fast Charging Station Architectures based on Multiphase-Medium-Frequency Transformer. , 2018, , .		4
252	Graph Theory-Based Power Routing in Modular Power Converters Considering Efficiency and Reliability. , 2018, , .		6

#	Article	IF	Citations
253	Voltage-Based Load Control for Frequency Support Provision by HVDC Systems. , 2018, , .		9
254	Power Device Lifetime Extension of Dc-Dc Interleaved Converters via Power Routing. , 2018, , .		7
255	Smart Transformer for the Provision of Coordinated Voltage and Frequency Support in the Grid. , 2018, , .		9
256	Application of Smart Transformer Load Control to mitigate Voltage Fluctuations in Medium Voltage Networks. , 2018, , .		1
257	Application Layer Design for Smart Battery Pack Control with Wi-FiÂ® Feedback. , 2018, , .		2
258	Active Redundancy in the Low Voltage Stage of Smart Transformers. , 2018, , .		1
259	Lifetime Control of Modular Smart Transformers Considering the Maintenance Schedule. , 2018, , .		3
260	Improved Fault Current Calculation Method for Pole-to-Pole Faults in MMC Multi-Terminal HVDC Grids Considering Control Dynamics. , 2018, , .		6
261	Discontinuous Modulation based Power Routing for Modular Smart Transformers. , 2018, , .		5
262	Comparison of Voltage Control Strategies for Wind Parks. , 2018, , .		2
263	Design of a Medium Voltage DC Fast Charging Station with Grid Voltage Regulation and Central Modular Multilevel Converter. , 2018, , .		13
264	Enhanced Control of DFIG Wind Turbine Based on Stator Flux Decay Compensation. , 2018, , .		1
265	Impact of Modulation Methods on the Trade-Off between Investment and Operation Costs of a Medium-Voltage MMC-based STATCOM. , 2018, , .		2
266	Active thermal control for delaying maintenance of power electronics converters. Chinese Journal of Electrical Engineering, 2018, 4, 13-20.	3.4	12
267	Efficiency/cost trade-off design of a multiple-active-bridge converter for smart transformer. , 2018, , .		3
268	A Quadruple Active Bridge converter as the storage interface in the more electric aircraft. , 2018, , .		4
269	Comparison of voltage support services by means of STATCOM and smart transformer in medium voltage grid. , 2018, , .		5
270	Neutral current reduction control for smart transformer under the imbalanced load in distribution system. , 2018, , .		6

#	Article	IF	Citations
271	Reliability of Power Electronic Systems: An Industry Perspective. IEEE Industrial Electronics Magazine, 2018, 12, 24-35.	2.6	201
272	Requirement analysis of hybrid direct current breaker in multiâ€terminal highâ€voltage direct current grids. Journal of Engineering, 2018, 2018, 1066-1071.	1.1	4
273	Investigation on Common-Mode Voltage Suppression in Smart Transformer-Fed Distributed Hybrid Grids. IEEE Transactions on Power Electronics, 2018, 33, 8438-8448.	7.9	30
274	A Smart Transformer-Rectifier Unit for the More Electric Aircraft. , 2018, , .		7
275	Reliability Oriented Control of DC/DC Converters for More Electric Aircraft. , 2018, , .		5
276	Overview and design of solid-state transformers. , 2018, , 215-243.		0
277	On-Line Load Sensitivity Identification in LV Distribution Grids. IEEE Transactions on Power Systems, 2017, 32, 1570-1571.	6.5	65
278	IR Camera Validation of IGBT Junction Temperature Measurement via Peak Gate Current. IEEE Transactions on Power Electronics, 2017, 32, 3099-3111.	7.9	75
279	Power Routing for Cascaded H-Bridge Converters. IEEE Transactions on Power Electronics, 2017, 32, 9435-9446.	7.9	77
280	Integration of Large Photovoltaic and Wind System by Means of Smart Transformer. IEEE Transactions on Industrial Electronics, 2017, 64, 8928-8938.	7.9	58
281	Highly Efficient and Reliable SiC-Based DCâ€“DC Converter for Smart Transformer. IEEE Transactions on Industrial Electronics, 2017, 64, 8383-8392.	7.9	55
282	Waveform peak shaping by multi-frequency power transfer in internal, single-phase distribution systems. , 2017, , .		1
283	Highly efficient and reliable DC-DC converter for smart transformer. , 2017, , .		4
284	Impacts of unbalanced grid voltages on lifetime of DC-link capacitors of back-to-back converters in wind turbines with doubly-fed induction generators. , 2017, , .		4
285	The Smart Transformer: A solid-state transformer tailored to provide ancillary services to the distribution grid. IEEE Power Electronics Magazine, 2017, 4, 56-67.	0.7	220
286	A family of series-resonant dc-dc converter with fault-tolerant capability. , 2017, , .		2
287	Active thermal control of a DC/DC GaN-based converter. , 2017, , .		11
288	Modulation strategy for highly reliable cascade H-Bridge inverter based on discontinuous PWM. , 2017, , .		7

#	Article	IF	Citations
289	Damping Methods for Resonances Caused by LCL-Filter-Based Current-Controlled Grid-Tied Power Inverters: An Overview. IEEE Transactions on Industrial Electronics, 2017, 64, 7402-7413.	7.9	287
290	Lifetime-Based Power Routing of a Quadruple Active Bridge DC/DC Converter. IEEE Transactions on Power Electronics, 2017, 32, 8892-8903.	7.9	48
291	Quad-Active-Bridge DCâ€“DC Converter as Cross-Link for Medium-Voltage Modular Inverters. IEEE Transactions on Industry Applications, 2017, 53, 1243-1253.	4.9	88
292	Improving System Efficiency for the More Electric Aircraft: A Look at dc/dc Converters for the Avionic Onboard dc Microgrid. IEEE Industrial Electronics Magazine, 2017, 11, 26-36.	2.6	107
293	Voltage control by means of smart transformer in medium voltage feeder with distribution generation. , 2017, , .		9
294	Comparative analysis of MAB dc-dc converters configurations in modular smart transformer. , 2017, , .		11
295	Enhancing the provision of ancillary services from storage systems using smart transformer and smart meters. , 2017, , .		3
296	A quadruple active bridge electrical power distribution system for the more electric aircraft. , 2017, , .		1
297	Decentralized reactive power and voltage control of wind farms with type-4 generators. , 2017, , .		7
298	Impacts of rotor current control targets on DC-link capacitor lifetime in DFIG-based wind turbine during grid voltage unbalance. , 2017, , .		10
299	Modular Smart Transformer architectures: An overview and proposal of a interphase architecture. , 2017, , .		14
300	Thermal Stress Analysis of Medium-Voltage Converters for Smart Transformers. IEEE Transactions on Power Electronics, 2017, 32, 4753-4765.	7.9	32
301	Reactive Power Flow Control for PV Inverters Voltage Support in LV Distribution Networks. IEEE Transactions on Smart Grid, 2017, 8, 447-456.	9.0	122
302	Zero-Sequence Voltage Modulation Strategy for Multiparallel Converters Circulating Current Suppression. IEEE Transactions on Industrial Electronics, 2017, 64, 1841-1852.	7.9	36
303	A Fault-Tolerant Series-Resonant DCâ€“DC Converter. IEEE Transactions on Power Electronics, 2017, 32, 900-905.	7.9	85
304	Analysis of the Robustness of Transformerless PV Inverter Topologies to the Choice of Power Devices. IEEE Transactions on Power Electronics, 2017, 32, 5248-5257.	7.9	28
305	Voltage balancing of modular smart transformers based on dual active bridges. , 2017, , .		12
306	New Technique Trends for Power Converters in Distributed Power Generation Systems - Part I. IEEE Transactions on Industrial Electronics, 2017, 64, 7399-7401.	7.9	1

#	Article	IF	Citations
307	Operation and control of smart transformer-based electric vehicles charging system. , 2017, , .		4
308	DC/DC conversion solutions to enable smart-grid behavior in the aircraft electrical power distribution system. , 2017, , .		12
309	Analysis and design of LCL filter based synchronverter. , 2017, , .		8
310	Interleaved operation of parallel neutral-point clamped inverters with reduced circulating current. , 2017, , .		4
311	Active methods to improve reliability in power electronics. , 2017, , .		3
312	Voltage quality improvement in smart transformer integrated distribution grid. , 2017, , .		2
313	A method for hotspot temperature estimation of aluminum electrolytic capacitors. , 2017, , .		8
314	GaN-based triple active bridge for avionic application. , 2017, , .		3
315	Evaluation of SiC and GaN technologies for a full-bridge grid-connected converter through a comprehensive performance index. , 2017, , .		2
316	Optimized modulation in parallel neutral-point clamped inverters for circulating current reduction: A space vector analysis. , 2017, , .		2
317	Voltage control strategies of smart transformer considering DC capacitor lifetime. , 2017, , .		6
318	Comparison of voltage control methods of CHB converters for power routing in smart transformer. , 2017, , .		3
319	Resilient multi-bus distribution in more electric aircraft by means of dual active bridges. , 2017, , .		4
320	A moving pole-placement compensation design method to increase the bandwidth of RC-damper-based dual â€œBuck-Boostâ€•AC/DC converter. , 2017, , .		1
321	Stability analysis of synchronization of parallel power converters. , 2017, , .		16
322	Investigation of load compensation features of smart transformer in medium voltage grid. , 2017, , .		1
323	Analysis and design of asymmetric quad-active-bridge converter. , 2017, , .		5
324	Overload Control in Smart Transformer-Fed Grid. Applied Sciences (Switzerland), 2017, 7, 208.	2.5	13

#	Article	IF	Citations
325	Thermal Stress Analysis and MPPT Optimization of Photovoltaic Systems. IEEE Transactions on Industrial Electronics, 2016, 63, 4889-4898.	7.9	53
326	Analysis of the frequencyâ€based control of a master/slave microâ€grid. IET Renewable Power Generation, 2016, 10, 1570-1576.	3.1	34
327	Thermal-based finite control set model predictive control for IGBT power electronic converters. , 2016, , .		14
328	Smart transformer-based hybrid grid loads support in partial disconnection of MV/HV power system. , 2016, , .		17
329	Bidirectional series-resonant DC-DC converter with fault-tolerance capability for smart transformer. , 2016, , .		14
330	Gate driver for the active thermal control of a DC/DC GaN-based converter. , 2016, , .		17
331	Reverse power flow control in a ST-fed distribution grid. , 2016, , .		4
332	Voltage stability analysis using a complete model of grid-connected voltage-source converters. , 2016, , .		9
333	Computational light junction temperature estimator for active thermal control. , 2016, , .		27
334	Multi-frequency power routing for cascaded H-bridge inverters in smart transformer application. , 2016, , .		7
335	Resonance identification and damping in AC-grids by means of multi MW grid converters. , 2016, , .		4
336	Power-Hardware-In-Loop harmonic analysis of a Smart Transformer-fed distribution grid. , 2016, , .		4
337	Active thermal control of isolated soft switching DC/DC converters. , 2016, , .		6
338	Investigation on the common mode currents in a smart transformer-fed low-voltage grid. , 2016, , .		1
339	Quadruple Active Bridge DC-DC converter as the basic cell of a modular Smart Transformer. , 2016, , .		18
340	Frequency adaptive control of a smart transformer-fed distribution grid. , 2016, , .		8
341	Topology and control strategy for accelerated lifetime test setup of DC-link capacitor of wind turbine converter. , 2016, , .		8
342	Design of External Inductor for Improving Performance of Voltage Controlled DSTATCOM. IEEE Transactions on Industrial Electronics, 2016, , 1-1.	7.9	18

#	Article	IF	Citations
343	Power Routing in Modular Smart Transformers: Active Thermal Control Through Uneven Loading of Cells. IEEE Industrial Electronics Magazine, 2016, 10, 43-53.	2.6	94
344	Smart Transformer reliability and efficiency through modularity. , 2016, , .		19
345	Variable frequency voltage control in a ST-fed grid by means of a Fractional-Order Repetitive Control. , 2016, , .		0
346	Enhanced Control of DFIG Wind Turbine Based on Stator Flux Decay Compensation. IEEE Transactions on Energy Conversion, 2016, 31, 1366-1376.	5.2	20
347	Control and communication in the Smart Transformer-fed grid. , 2016, , .		8
348	LCL filter based UPQC configuration for power quality improvement. , 2016, , .		6
349	Loss balancing of three-level inverters in electric vehicles for low speed operation. , 2016, , .		8
350	Simulated and measured efficiency verification power circulation method of a high power low voltage NPC converter for wind turbines. , 2016, , .		4
351	Wide frequency range medium-voltage grid impedance analysis by current injection of a multi-MW power converter. , 2016, , .		5
352	Active thermal balancing for modular multilevel converters in HVDC applications. , 2016, , .		14
353	Circulating current control for modular multilevel converter based on selective harmonic elimination with ultra-low switching frequency. , 2016, , .		10
354	H8 Inverter for Common-Mode Voltage Reduction in Electric Drives. IEEE Transactions on Industry Applications, 2016, 52, 4010-4019.	4.9	55
355	The Smart Transformer: Impact on the Electric Grid and Technology Challenges. IEEE Industrial Electronics Magazine, 2016, 10, 46-58.	2.6	322
356	A Review of Passive Power Filters for Three-Phase Grid-Connected Voltage-Source Converters. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2016, 4, 54-69.	5.4	361
357	Frequency-Domain Thermal Modeling and Characterization of Power Semiconductor Devices. IEEE Transactions on Power Electronics, 2016, 31, 7183-7193.	7.9	147
358	Study of reliability-efficiency tradeoff of active thermal control for power electronic systems. Microelectronics Reliability, 2016, 58, 119-125.	1.7	65
359	IGBT Junction Temperature Measurement via Peak Gate Current. IEEE Transactions on Power Electronics, 2016, 31, 3784-3793.	7.9	115
360	Optimal Design of High-Order Passive-Damped Filters for Grid-Connected Applications. IEEE Transactions on Power Electronics, 2016, 31, 2083-2098.	7.9	240

#	Article	IF	Citations
361	Design of a grid adaptive controller for PWM converters with LCL filters. , 2015, , .		1
362	Online junction temperature measurement using peak gate current. , 2015, , .		28
363	Resonance damping in a smart transformer-based microgrid. , 2015, , .		8
364	Thermal stress comparison in modular power converter topologies for smart transformers in the electrical distribution system. , 2015, , .		2
365	Comparison of basic power cells for quad-active-bridge DC-DC converter in smart transformer. , 2015, , .		8
366	A new prospective of smart transformer application: Dual microgrid (DMG) operation. , 2015, , .		21
367	Thermal stress reduced maximum power point tracking for two stages photovoltaic converters. , 2015, , .		5
368	Quad-active-bridge as cross-link for medium voltage modular inverters. , 2015, , .		9
369	Active thermal control of IGBT power electronic converters. , 2015, , .		52
370	Modular DC/DC converter structure with multiple power flow paths for smart transformer applications. , 2015, , .		8
371	Experimental evaluation of IGBT junction temperature measurement via peak gate current. , 2015, , .		8
372	Voltage Control Architectures for the Universal Operation of DPGS. IEEE Transactions on Industrial Informatics, 2015, 11, 313-321.	11.3	13
373	A New PWM Strategy for Grid-Connected Half-Bridge Active NPC Converters With Losses Distribution Balancing Mechanism. IEEE Transactions on Power Electronics, 2015, 30, 5331-5340.	7.9	84
374	Control strategies for multi-frequency power transfer in a smart-transformer-fed low-voltage grid. , 2015, , .		6
375	Voltage and current balancing in Low and Medium Voltage grid by means of Smart Transformer. , 2015, , .		18
376	Coordinated frequency and Voltage Overload Control of Smart Transformers. , 2015, , .		13
377	Frequency-domain thermal modelling of power semiconductor devices. , 2015, , .		2
378	DC Multibus based on a Single-Star Bridge Cells Modular Multilevel Cascade Converter for DC smart grids. , 2015, , .		3

#	Article	IF	Citations
379	Frequency-Based Overload Control of Smart Transformers. , 2015, , .		14
380	Operation and control of smart transformer for improving performance of medium voltage power distribution system. , 2015, , .		25
381	Modified Discontinuous PWM for Size Reduction of the Circulating Current Filter in Parallel Interleaved Converters. IEEE Transactions on Power Electronics, 2015, 30, 3457-3470.	7.9	98
382	Power Controllability of a Three-Phase Converter With an Unbalanced AC Source. IEEE Transactions on Power Electronics, 2015, 30, 1591-1604.	7.9	149
383	Distortion-Free Saturators for Power Converters Under Unbalanced Conditions. IEEE Transactions on Power Electronics, 2015, 30, 3364-3375.	7.9	22
384	Thermal Loading and Lifetime Estimation for Power Device Considering Mission Profiles in Wind Power Converter. IEEE Transactions on Power Electronics, 2015, 30, 590-602.	7.9	447
385	Impact of the modularity on the efficiency of Smart Transformer solutions. , 2014, , .		10
386	Sensitivity analysis of transformerless PV inverter topologies to physical variations of power devices. , 2014, , .		1
387	Multi-frequency power transfer in a smart transformer based distribution grid. , 2014, , .		23
388	Comparative evaluation of passive damping topologies for parallel grid-connected converters with LCL filters. , 2014, , .		26
389	New optimal design method for trap damping sections in grid-connected LCL filters. , 2014, , .		4
390	Frequency-based control of a micro-grid with multiple renewable energy sources. , 2014, , .		12
391	An Active Damper for Stabilizing Power-Electronics-Based AC Systems. IEEE Transactions on Power Electronics, 2014, 29, 3318-3329.	7.9	298
392	Reduction of DC-link capacitor in case of cascade multilevel converters by means of reactive power control. , 2014, , .		14
393	A Robust Passive Damping Method for LLCL-Filter-Based Grid-Tied Inverters to Minimize the Effect of Grid Harmonic Voltages. IEEE Transactions on Power Electronics, 2014, 29, 3279-3289.	7.9	201
394	Transitioning to Physics-of-Failure as a Reliability Driver in Power Electronics. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2014, 2, 97-114.	5.4	681
395	Systematic Design of the Lead-Lag Network Method for Active Damping in LCL-Filter Based Three Phase Converters. IEEE Transactions on Industrial Informatics, 2014, 10, 43-52.	11.3	210
396	Review of active thermal and lifetime control techniques for power electronic modules. , 2014, , .		52

#	Article	IF	Citations
397	Online junction temperature measurement via internal gate resistance during turn-on. , 2014, , .		33
398	Robustness evaluation of transformerless PV inverter topologies. , 2014, , .		5
399	Reliability-oriented energy storage sizing in wind power systems. , 2014, , .		3
400	Operating and Loading Conditions of a Three-Level Neutral-Point-Clamped Wind Power Converter Under Various Grid Faults. IEEE Transactions on Industry Applications, 2014, 50, 520-530.	4.9	53
401	Comparative analysis of the selective resonant LCL and LCL plus trap filters. , 2014, , .		6
402	Integrated voltage control and line congestion management in Active Distribution Networks by means of smart transformers. , 2014, , .		27
403	A Self-commissioning Notch Filter for Active Damping in a Three-Phase LCL -Filter-Based Grid-Tie Converter. IEEE Transactions on Power Electronics, 2014, 29, 6754-6761.	7.9	166
404	Passivity-Based Control by Series/Parallel Damping of Single-Phase PWM Voltage Source Converter. IEEE Transactions on Control Systems Technology, 2014, 22, 1310-1322.	5.2	49
405	<italic>LCL</italic>-Filter Design for Robust Active Damping in Grid-Connected Converters. IEEE Transactions on Industrial Informatics, 2014, 10, 2192-2203.	11.3	215
406	Improved Reliability of Power Modules: A Review of Online Junction Temperature Measurement Methods. IEEE Industrial Electronics Magazine, 2014, 8, 17-27.	2.6	168
407	A review of passive filters for grid-connected voltage source converters. , 2014, , .		57
408	An active damping method based on biquad digital filter for parallel grid-interfacing inverters with LCL filters. , 2014, , .		15
409	An active damper to suppress multiple resonances with unknown frequencies. , 2014, , .		33
410	A Survey of Control Issues in PMSG-Based Small Wind-Turbine Systems. IEEE Transactions on Industrial Informatics, 2013, 9, 1211-1221.	11.3	193
411	Toward Reliable Power Electronics: Challenges, Design Tools, and Opportunities. IEEE Industrial Electronics Magazine, 2013, 7, 17-26.	2.6	668
412	Self-commissioning notch filter for active damping in three phase LCL-filter based grid converters. , 2013, , .		3
413	DC-bias cancellation for phase shift controlled dual active bridge. , 2013, , .		3
414	Robust design of LCL-filters for active damping in grid converters. , 2013, , .		5

#	Article	IF	Citations
415	Analysis of the Passive Damping Losses in LCL-Filter-Based Grid Converters. IEEE Transactions on Power Electronics, 2013, 28, 2642-2646.	7.9	637
416	Improving photovoltaic and electric vehicle penetration in distribution grids with smart transformer. , 2013, , .		2
417	Catastrophic failure and fault-tolerant design of IGBT power electronic converters - an overview. , 2013, , .		145
418	Energy storage system by means of improved thermal performance of a 3 MW grid side wind power converter. , 2013, , .		5
419	Thermal analysis of multi-MW two-level generator side converters with reduced common-mode-voltage modulation methods for wind turbines. , 2013, , .		0
420	Robustness analysis of the efficiency in PV inverters. , 2013, , .		8
421	Universal wind turbine working in grid-connected and island operating modes. Mathematics and Computers in Simulation, 2013, 91, 41-51.	4.4	7
422	Thermal Analysis of Multilevel Grid-Side Converters for 10-MW Wind Turbines Under Low-Voltage Ride Through. IEEE Transactions on Industry Applications, 2013, 49, 909-921.	4.9	55
423	Reactive Power Influence on the Thermal Cycling of Multi-MW Wind Power Inverter. IEEE Transactions on Industry Applications, 2013, 49, 922-930.	4.9	146
424	Control of transformerless MMC-HVDC during asymmetric grid faults. , 2013, , .		19
425	Power controllability of three-phase converter with unbalanced AC source. , 2013, , .		19
426	Comparison of multi-MW converters considering the determining factors in wind power application. , 2013, , .		4
427	Lifetime estimation for the power semiconductors considering mission profiles in wind power converter. , 2013, , .		31
428	Generation of random wind speed profiles for evaluation of stress in WT power converters. , 2013, , .		0
429	Dynamic analysis of active damping methods for LCL-filter-based grid converters. , 2013, , .		7
430	Review of modular power converters solutions for smart transformer in distribution system. , 2013, , .		55
431	Hierarchical control of a small wind turbine system for active integration in LV distribution network. , 2013, , .		6
432	Control Issues in Single-Stage Photovoltaic Systems: MPPT, Current and Voltage Control. IEEE Transactions on Industrial Informatics, 2012, 8, 241-254.	11.3	266

#	Article	IF	Citations
433	Small wind turbines in grid-interactive microgrids. , 2012, , .		0
434	Different approaches of stationary reference frames saturators. , 2012, , .		7
435	Power Electronics Converters for Wind Turbine Systems. IEEE Transactions on Industry Applications, 2012, 48, 708-719.	4.9	737
436	Reactive power influence on the thermal cycling of multi-MW wind power inverter. , 2012, , .		10
437	A synchronization technique for microgrid reclosing after islanding operation. , 2012, , .		7
438	Resonance propagation of parallel-operated DC-AC converters with LCL filters. , 2012, , .		17
439	New chaotic phenomena occurring during voltage sags in small wind turbine systems based on back-to-back converters. , 2012, , .		0
440	Introduction to the Special Section on the 2010 IEEE International Symposium on Industrial Electronics. IEEE Transactions on Industrial Electronics, 2012, 59, 3666-3668.	7.9	0
441	Performance Evaluation of Active Islanding-Detection Algorithms in Distributed-Generation Photovoltaic Systems: Two Inverters Case. IEEE Transactions on Industrial Electronics, 2011, 58, 1185-1193.	7.9	82
442	Overview of Multi-MW Wind Turbines and Wind Parks. IEEE Transactions on Industrial Electronics, 2011, 58, 1081-1095.	7.9	726
443	Thermal analysis of multilevel grid side converters for 10 MW wind turbines under Low Voltage Ride Through. , 2011, , .		9
444	Online Optimal Reactive Power Control Strategy of PV Inverters. IEEE Transactions on Industrial Electronics, 2011, 58, 4549-4558.	7.9	202
445	Filter-Based Active Damping of Voltage Source Converters With LCL Filter. IEEE Transactions on Industrial Electronics, 2011, 58, 3623-3633.	7.9	545
446	Grid-Filter Design for a Multimegawatt Medium-Voltage Voltage-Source Inverter. IEEE Transactions on Industrial Electronics, 2011, 58, 1205-1217.	7.9	352
447	Future Energy Systems: Integrating Renewable Energy Sources into the Smart Power Grid Through Industrial Electronics. IEEE Industrial Electronics Magazine, 2010, 4, 18-37.	2.6	817
448	An Interview with Prof. Fumio Harashima [Profiles. IEEE Industrial Electronics Magazine, 2010, 4, 6-8.	2.6	0
449	Power electronics for PV power systems integration. , 2010, , .		6
450	Discrete wavelet transforms applied to the evaluation of the averaged load conductance in shunt active power filters. , 2009, , .		2

#	Article	IF	Citations
451	Magazine article wins award [Editor's column]. IEEE Industrial Electronics Magazine, 2009, 3, 2-2.	2.6	0
452	Dr. Bimal K. Bose: A reference for generations [Editor's Column]. IEEE Industrial Electronics Magazine, 2009, 3, 2-5.	2.6	6
453	Let's Meet in Bari! [Editor's column]. IEEE Industrial Electronics Magazine, 2009, 3, 2-2.	2.6	1
454	Reactive Power Control for Improving Wind Turbine System Behavior Under Grid Faults. IEEE Transactions on Power Electronics, 2009, 24, 1798-1801.	7.9	130
455	Evaluation of Three-Phase Transformerless Photovoltaic Inverter Topologies. IEEE Transactions on Power Electronics, 2009, 24, 2202-2211.	7.9	374
456	Evaluation of Current Controllers for Distributed Power Generation Systems. IEEE Transactions on Power Electronics, 2009, 24, 654-664.	7.9	787
457	The PWM strategies of grid-connected distributed generation active NPC inverters. , 2009, , .		8
458	A Single-Phase Voltage-Controlled Grid-Connected Photovoltaic System With Power Quality Conditioner Functionality. IEEE Transactions on Industrial Electronics, 2009, 56, 4436-4444.	7.9	208
459	Voltage Support Provided by a Droop-Controlled Multifunctional Inverter. IEEE Transactions on Industrial Electronics, 2009, 56, 4510-4519.	7.9	279
460	An overview of anti-islanding detection algorithms in photovoltaic systems in case of multiple current-controlled inverters. , 2009, , .		10
461	FBD-method based controller for shunt active power filters in marine vessels. , 2008, , .		4
462	Milestones and Good News [Editor's Column]. IEEE Industrial Electronics Magazine, 2008, 2, 2-2.	2.6	0
463	Good practices for good articles [Editor's Column]. IEEE Industrial Electronics Magazine, 2008, 2, 2-2.	2.6	0
464	The Word Is Getting Around [Editor's Column]. IEEE Industrial Electronics Magazine, 2008, 2, 2-2.	2.6	0
465	Bridging academia and industry [From the Editor]. IEEE Industrial Electronics Magazine, 2008, 2, 2-2.	2.6	0
466	Overview of PI-Based Solutions for the Control of DC Buses of a Single-Phase H-Bridge Multilevel Active Rectifier. IEEE Transactions on Industry Applications, 2008, 44, 857-866.	4.9	175
467	Study of the Effects of Inductor Nonlinear Behavior on the Performance of Current Controllers for Single-Phase PV Grid Converters. IEEE Transactions on Industrial Electronics, 2008, 55, 2043-2052.	7.9	110
468	Industrial electronics for renewable energy. , 2008, , .		1

#	Article	IF	Citations
469	Unified power quality conditioner (UPQC) with voltage dips and over-voltages compensation capability. Renewable Energy and Power Quality Journal, 2008, 1, 294-299.	0.2	5
470	Your Contributions Are Welcome [Editor's Column]. IEEE Industrial Electronics Magazine, 2007, 1, 2-2.	2.6	0
471	Wavelet-Based Islanding Detection Algorithm for Single-Phase Photovoltaic (PV) Distributed Generation Systems. , 2007, , .		24
472	Welcome to your new publication! [Editor's Column]. IEEE Industrial Electronics Magazine, 2007, 1, 2-2.	2.6	0
473	A Look at IEEE Industrial Electronics Magazine [Editor's Column]. IEEE Industrial Electronics Magazine, 2007, 1, 2-2.	2.6	1
474	Grid Impedance Estimation via Excitation of LCL-Filter Resonance. IEEE Transactions on Industry Applications, 2007, 43, 1401-1407.	4.9	173
475	Shunt active filters to mitigate harmonic propagation in distribution lines. , 2007, , 269-297.		1
476	Passivity-Based Harmonic Control through Series/Parallel Damping of an H-Bridge Rectifier. , 2007, , .		7
477	A Comparative Analysis of Real-Time Algorithms for Power Signal Decomposition in Multiple Synchronous Reference Frames. IEEE Transactions on Power Electronics, 2007, 22, 1280-1289.	7.9	99
478	Design of line front-end converter systems under real line conditions. , 2007, , 191-224.		0
479	Adjoint network theory to analyse the power converters with respect to their line-side behaviour. , 2007, , 225-244.		0
480	Linear and Nonlinear Control of Distributed Power Generation Systems. Conference Record - IAS Annual Meeting (IEEE Industry Applications Society), 2006, , .	0.0	33
481	Overview of Anti-Islanding Algorithms for PV Systems. Part I: Passive Methods. , 2006, , .		132
482	Control Strategies for Distributed Power Generation Systems Operating on Faulty Grid. , 2006, , .		73
483	Optimal tuning of a fuzzy logic-based single-phase active power filter via the Nelder-Mead method. International Journal of Computer Applications in Technology, 2006, 27, 144.	0.5	6
484	Overview of Anti-Islanding Algorithms for PV Systems. Part I: Passive Methods. , 2006, , .		17
485	Overview of Anti-Islanding Algorithms for PV Systems. Part II: ActiveMethods. , 2006, , .		44
486	SENSITIVITY ANALYSIS OF AN LCL-FILTER-BASED THREE-PHASE ACTIVE RECTIFIER VIA A "VIRTUAL CIRCUIT" APPROACH. Journal of Circuits, Systems and Computers, 2004, 13, 665-686.	1.5	5

#	Article	IF	Citations
487	Step-by-step design procedure for a grid-connected three-phase PWM voltage source converter. International Journal of Electronics, 2004, 91, 445-460.	1.4	194
488	PLL Algorithm for Power Generation Systems Robust to Grid Voltage Faults. , 0, , .		63