Yongdong Li

List of Publications by Year in Descending Order

165 papers	**2,473** citations	**22** h-index	**45** g-index
229 ext. papers	**3,333** ext. citations	**5.3** avg, IF	**5.55** L-index

#	Paper	IF	Citations
165	Submodule Fault-Tolerant Control of Modular Multilevel Matrix Converters with Adaptive Optimum Common-Mode Voltage Injection. *IEEE Transactions on Power Electronics*, **2022**, 1-1	7.2	
164	Fault Detection and Tolerant Control of IGBT Open-Circuit Failures in Modular Multilevel Matrix Converters. *IEEE Journal of Emerging and Selected Topics in Power Electronics*, **2022**, 1-1	5.6	3
163	A Quasi-Two-Level Medium-Voltage SiC MOSFET Power Module With Low Loss and Voltage Self-Balance. *IEEE Transactions on Power Electronics*, **2022**, 37, 519-533	7.2	3
162	A Generalized Simplified Virtual Vector PWM to Balance the Capacitor Voltages of Multilevel Diode-Clamped Converters. *IEEE Transactions on Power Electronics*, **2022**, 1-1	7.2	2
161	A Generalized, Fast and Robust Open-Circuit Fault Diagnosis Technique for Star-connected Symmetrical Multiphase Drives. *IEEE Transactions on Energy Conversion*, **2022**, 1-1	5.4	2
160	A Fuzzy Approximation for FCS-MPC in Power Converters. *IEEE Transactions on Power Electronics*, **2022**, 1-1	7.2	6
159	Decoupled Discrete Current Control for AC Drives at Low Sampling-to-Fundamental Frequency Ratios. *IEEE Journal of Emerging and Selected Topics in Power Electronics*, **2022**, 1-1	5.6	
158	Optimal Fault-tolerant Control of Multiphase Drives under Open-phase/Open-switch Faults Based on DC Current Injection. *IEEE Transactions on Power Electronics*, **2021**, 1-1	7.2	9
157	Parasitic Parameter Extraction and Identification Method for HFT based on DC-DC Converter in EV Application. *IEEE Journal of Emerging and Selected Topics in Power Electronics*, **2021**, 1-1	5.6	3
156	Loss Imbalance and Transient DC-Bias Mitigation in Dual-Active-Bridge DC/DC Converters. *IEEE Journal of Emerging and Selected Topics in Power Electronics*, **2021**, 9, 1399-1409	5.6	8
155	State Estimation for Situational Awareness of Active Distribution System With Photovoltaic Power Plants. *IEEE Transactions on Smart Grid*, **2021**, 12, 239-250	10.7	8
154	Improved Interleaved Discontinuous PWM for Zero-Sequence Circulating Current Reduction in Three-Phase Paralleled Converters. *IEEE Transactions on Industrial Electronics*, **2021**, 68, 8676-8686	8.9	7
153	Current Discrepancy Mitigation of Input-Parallel Output-Parallel Dual-Active-Bridge Converters Using Coupled Inductors. *IEEE Transactions on Industrial Electronics*, **2021**, 68, 8182-8192	8.9	4
152	A High-Step-Up Low-Ripple and High-Efficiency DC-DC Converter for Fuel-Cell Vehicles. *IEEE Transactions on Power Electronics*, **2021**, 1-1	7.2	5
151	Online Estimation of Per-phase Stator Resistance Based on DC-Signal Injection for Condition Monitoring in Multiphase Drives. *IEEE Transactions on Industrial Electronics*, **2021**, 1-1	8.9	11
150	A General Analytical Model and Optimization for Leakage Inductances of Medium-Frequency Transformers. *IEEE Journal of Emerging and Selected Topics in Power Electronics*, **2021**, 1-1	5.6	4
149	A Comprehensive Framework for Robust AC/DC Grid State Estimation against Measurement and Control Input Errors. *IEEE Transactions on Power Systems*, **2021**, 1-1	7	1

148	Comprehensive control strategy and robust operation for input series output parallel power electronics transformers in MVDC grids. *International Transactions on Electrical Energy Systems*, **2020**, 30, e12437	2.2	
147	A Generalized Carrier-Overlapped PWM Method for Neutral-Point-Clamped Multilevel Converters. *IEEE Transactions on Power Electronics*, **2020**, 35, 9095-9106	7.2	30
146	Optimization of medium-frequency transformers with large capacity and high insulation requirement **2020**,		2
145	A Fast Multilevel SVPWM Method Based on the Imaginary Coordinate With Direct Control of Redundant Vectors or Zero Sequence Components. *IEEE Open Journal of the Industrial Electronics Society*, **2020**, 1, 355-366	3.6	2
144	A Comprehensive Study of Common Mode Voltage Reduction and Neutral Point Potential Balance for a Back-to-Back Three-Level NPC Converter. *IEEE Transactions on Power Electronics*, **2020**, 35, 7910-7920	7.2	12
143	. *IEEE Journal of Emerging and Selected Topics in Power Electronics*, **2020**, 8, 1894-1910	5.6	6
142	An Optimized Carrier-Based PWM Method and Voltage Balancing Control for Five-Level ANPC Converters. *IEEE Transactions on Industrial Electronics*, **2020**, 67, 9120-9132	8.9	19
141	Research on Modelling and Stability Characteristics of Electric Traffic Energy System Based on ZVS-DAB Converter. *Journal of Electrical and Computer Engineering*, **2020**, 2020, 1-10	1.9	1
140	An Online Global Fault-Tolerant Control Strategy for Symmetrical Multiphase Machines With Minimum Losses in Full Torque Production Range. *IEEE Transactions on Power Electronics*, **2020**, 35, 2819-2830	7.2	17
139	A Dual-Active-Clamp Quasi-Resonant Isolated Boost Converter for PV Integration to Medium-Voltage DC Grids. *IEEE Journal of Emerging and Selected Topics in Power Electronics*, **2020**, 8, 3444-3456	5.6	8
138	Stability Analysis of Power Systems With Multiple STATCOMs in Close Proximity. *IEEE Transactions on Power Electronics*, **2020**, 35, 2268-2283	7.2	15
137	A robust offset-free model predictive current control for induction motor based on incremental model and incremental current observer **2019**,		2
136	Time Domain Analysis of Reactive Components and Optimal Modulation for Isolated Dual Active Bridge DC/DC Converters. *IEEE Transactions on Power Electronics*, **2019**, 34, 7143-7146	7.2	12
135	Shunt Isolated Active Power Filter With Common DC Link Integrating Braking Energy Recovery in Urban Rail Transit. *IEEE Access*, **2019**, 7, 39180-39191	3.5	2
134	Enhanced rotor field-oriented control of multiphase induction machines based on symmetrical components theory. *IET Power Electronics*, **2019**, 12, 656-666	2.2	12
133	System-Level Efficiency Evaluation of Isolated DC/DC Converters in Power Electronics Transformers for Medium-Voltage DC Systems. *IEEE Access*, **2019**, 7, 48445-48458	3.5	9
132	Analysis and Control of Three-Phase Modular Multilevel Converters Under the Single Arm Fault Condition. *IEEE Transactions on Power Electronics*, **2019**, 34, 8293-8298	7.2	11
131	Open-Loop Gate Control for Optimizing the Turn-ON Transition of SiC MOSFETs. *IEEE Journal of Emerging and Selected Topics in Power Electronics*, **2019**, 7, 1126-1136	5.6	3

130	An offset-free robust model predictive control with incremental model and improved current observer for induction motor. *International Transactions on Electrical Energy Systems*, **2019**, 29, e12130	2.2	3
129	Analysis and Control of Current Harmonics in Multiphase Machines in Fault-tolerant Operation against Open-phase Faults **2019**,		2
128	Accurate frequency-domain analysis and hybrid control method for isolated dual active bridge series resonant DC/DC converters. *IET Power Electronics*, **2019**, 12, 2932-2941	2.2	6
127	Common Mode Voltage and Neutral Point Potential Optimization Control for a Three-Level NPC Inverter **2019**,		1
126	A Neutral-Point Potential Balancing Method for a Three-Level Neutral-Point-Clamped Back-to-Back Converter **2019**,		1
125	Impact of the Parasitic Resistors in Compensation Inductors on a Multi-stage and Multi-load Wireless Power Transfer System **2019**,		1
124	Zero Sequence Circulating Current Reduction of Paralleled Converters With Interleaved Discontinuous PWM **2019**,		1
123	A Modified PSPWM for a Five-Level Hybrid-Clamped Inverter to Reduce Flying Capacitor Size. *IEEE Transactions on Industry Applications*, **2019**, 55, 1658-1666	4.3	13
122	An Improved Model Predictive Direct Torque Control Strategy for Reducing Harmonic Currents and Torque Ripples of Five-Phase Permanent Magnet Synchronous Motors. *IEEE Transactions on Industrial Electronics*, **2019**, 66, 5820-5829	8.9	35
121	Analysis and Suppression of Shaft Voltage in SiC-Based Inverter for Electric Vehicle Applications. *IEEE Transactions on Power Electronics*, **2019**, 34, 6276-6285	7.2	20
120	A Novel Carrier-Overlapped PWM Method for Four-Level Neutral-Point Clamped Converters. *IEEE Transactions on Power Electronics*, **2019**, 34, 7-12	7.2	30
119	Optimized Branch Current Control of Modular Multilevel Matrix Converters Under Branch Fault Conditions. *IEEE Transactions on Power Electronics*, **2018**, 33, 4578-4583	7.2	17
118	A Sawtooth Carrier-Based PWM for Asymmetrical Six-Phase Inverters With Improved Common-Mode Voltage Performance. *IEEE Transactions on Power Electronics*, **2018**, 33, 9444-9458	7.2	15
117	Topology and Control of a Five-Level Hybrid-Clamped Converter for Medium-Voltage High-Power Conversions. *IEEE Transactions on Power Electronics*, **2018**, 33, 4690-4702	7.2	20
116	A Novel Hybrid T-Type Three-Level Inverter Based on SVPWM for PV Application. *Journal of Electrical and Computer Engineering*, **2018**, 2018, 1-12	1.9	2
115	Research on space-vector modulation and common-mode voltage of four-leg matrix converter. *Journal of Engineering*, **2018**, 2018, 558-564	0.7	
114	A Modular-Cascaded Active-Balanced Storage System for Electric Transportation **2018**,		2
113	230 VAC/28 VDC high-power density power supply for more electric aircraft applications. *Journal of Engineering*, **2018**, 2018, 499-505	0.7	4

112	Permanent magnet synchronous machine starter/generators based high-voltage DC parallel electric power system for the more electric aircraft. *Journal of Engineering*, **2018**, 2018, 565-569	0.7	5
111	Hardware-in-the-loop real-time platform for more electric aircraft. *Journal of Engineering*, **2018**, 2018, 446-452	0.7	2
110	Phase-shift full bridge power supply based on SiC devices. *Journal of Engineering*, **2018**, 2018, 453-460	0.7	2
109	Research on Topology and Control of Household Energy Routers Based on Direct AC/AC Power Electronic Transformer **2018**,		2
108	A Modular Cascaded Multilevel Buck Converter Based on GaN Devices Designed for High Power Envelope Elimination and Restoration Applications **2018**,		2
107	MRAS Based Sensorless Control of High Speed PMSMs with I-F Startup Strategy **2018**,		1
106	Vector control implementation in field programmable gate array for 200 kHz GaN-based motor drive systems. *Journal of Engineering*, **2018**, 2018, 650-653	0.7	1
105	A New Control Strategy for Modular Multilevel Converter Operating in Quasi Two-Level PWM Mode **2018**,		5
104	Research on three-phase four-leg matrix converter based more electric aircraft wing ice protection system. *Journal of Engineering*, **2018**, 2018, 529-533	0.7	2
103	A Modular Multilevel T-Type Inverter Based on SVPWM for PV System Application **2018**,		1
102	Assessment of Virtual Synchronous Machine based Control in Grid-Tied Power Converters **2018**,		2
101	CMV reduction for five-level ANPC converter by PS-PWM strategy. *Journal of Engineering*, **2018**, 2018, 425-431	0.7	
100	Hierarchical System Design and Control of an MMC-Based Power-Electronic Transformer. *IEEE Transactions on Industrial Informatics*, **2017**, 13, 238-247	11.9	59
99	Research on Output Voltage Modulation of a Five-Level Matrix Converter. *IEEE Transactions on Power Electronics*, **2017**, 32, 2568-2583	7.2	4
98	. *IEEE Transactions on Energy Conversion*, **2017**, 32, 759-769	5.4	37
97	Common-mode voltage reduction for three-phase-to-four-leg direct matrix converter with a novel control strategy **2017**,		2
96	Stability assessment of utility PV integration to the distributed systems based on D-Q frame impedances and GNC **2017**,		2
95	Topology and Capacitor Voltage Balancing Control of a Symmetrical Hybrid Nine-Level Inverter for High-Speed Motor Drives. *IEEE Transactions on Industry Applications*, **2017**, 53, 5563-5572	4.3	43

94	Capacitor voltage estimation method of a symmetrical hybrid nine-level inverter with reduced voltage sensors **2017**,		1
93	Application of D-Q frame impedance-based stability criterion in power systems with multiple STATCOMs in proximity **2017**,		3
92	Multi-mode SHEPWM with low switch frequency for traction application **2017**,		3
91	Stability analysis on D-Q frame impedances in power systems with multiple STATCOMs in proximity **2017**,		2
90	Analysis of small-signal impedance of STATCOMs in D-Q frame **2017**,		3
89	Sensorless fault-tolerant control of multiphase induction machine using virtual winding and adaptive observer **2017**,		1
88	Modeling and Control of a Multiport Power Electronic Transformer (PET) for Electric Traction Applications. *IEEE Transactions on Power Electronics*, **2016**, 31, 915-927	7.2	95
87	Experimental verification of a virtual synchronous generator control concept **2016**,		1
86	Impact of PV inverter penetration on voltage profile and power loss in medium voltage distribution systems **2016**,		4
85	Impedance-based stability analysis of multiple STATCOMs in proximity **2016**,		9
84	Capacitor design optimization and power balance control for LLC resonant converter based power electronic traction transformer **2016**,		1
83	An energy router based on multi-winding high-frequency transformer **2016**,		6
82	Current Balance Control for Symmetrical Multiphase Inverters. *IEEE Transactions on Power Electronics*, **2016**, 31, 4005-4012	7.2	17
81	Reduction of Common-Mode Voltage in Multiphase Two-Level Inverters Using SPWM With Phase-Shifted Carriers. *IEEE Transactions on Power Electronics*, **2016**, 31, 6631-6645	7.2	66
80	A symmetrical hybrid nine-level inverter for high speed open-winding motor drive system **2016**,		4
79	A modular DC solid state transformer for future onboard DC grid **2016**,		3
78	Design, analysis and experimental evaluation of a virtual-synchronous-machine-based STATCOM with LCL filter **2015**,		3
77	Multi-objective optimization control of a four-level hybrid-clamped inverter **2015**,		1

76	Active and reactive power flow analysis of a STATCOM with virtual synchronous machine control **2015**,		4
75	**2015**,		11
74	Control strategies of a multiport power electronic transformer (PET) for DC distribution applications **2015**,		2
73	Capacitor Voltage Balancing of a Five-Level ANPC Converter Using Phase-Shifted PWM. *IEEE Transactions on Power Electronics*, **2015**, 30, 1147-1156	7.2	95
72	A carrier-based PWM method with zero-sequence current elimination for multiphase double-end winding drives **2015**,		2
71	A branch energy control method based on optimized neutral-point voltage injection for a hexagonal modular multilevel direct converter (Hexverter) **2015**,		9
70	Module-capacitor voltage fluctuation optimization control for an alternate arm converter **2015**,		6
69	A common-mode voltage reduction method for a back-to-back four-level hybrid-clamped converter **2015**,		4
68	A capacitor voltage balancing strategy for a five-level hybrid-clamped inverter **2015**,		4
67	Control of variable pitch and variable speed direct-drive wind turbines in weak grid systems with active power balance. *IET Renewable Power Generation*, **2014**, 8, 119-131	2.9	45
66	A Hybrid Cascaded Multilevel Converter for Battery Energy Management Applied in Electric Vehicles. *IEEE Transactions on Power Electronics*, **2014**, 29, 3537-3546	7.2	142
65	Stability and Voltage Balance Control of a Modular Converter With Multiwinding High-Frequency Transformer. *IEEE Transactions on Power Electronics*, **2014**, 29, 4183-4194	7.2	24
64	Multilevel Converter/Inverter Topologies and Applications **2014**, 422-462		10
63	**2014**,		22
62	Analysis and design of virtual synchronous machine based STATCOM controller **2014**,		15
61	PWM strategy of a novel cascaded multi-level converter for battery management **2014**,		2
60	Comparison of four carrier-based PWM methods for two-level five-phase inverter **2014**,		2
59	Evaluation and control design of virtual-synchronous-machine-based STATCOM for grids with high penetration of renewable energy **2014**,		14

58	Fuel cell applications on more electrical aircraft **2014**,		8
57	A novel modulation with voltage balancing control for a modular matrix converter **2014**,		1
56	A new five-level hybrid-clamped converter with reduced number of clamping devices **2014**,		5
55	Power characteristics of isolation units in a novel power electronic transformer (PET) for locomotive traction applications **2014**,		2
54	Control strategy of a multi-level converter with multi-winding MFT/HFT isolation **2014**,		4
53	A novel medium-frequency-transformer isolated matrix converter for wind power conversion applications **2014**,		2
52	Parameter identification of nine-phase induction machines with concentrated windings **2014**,		3
51	Adaptive Multi-Mode Power Control of a Direct-Drive PM Wind Generation System in a Microgrid. *IEEE Journal of Emerging and Selected Topics in Power Electronics*, **2013**, 1, 217-225	5.6	34
50	Neutral-Point Potential Balancing of a Five-Level Active Neutral-Point-Clamped Inverter. *IEEE Transactions on Industrial Electronics*, **2013**, 60, 1907-1918	8.9	95
49	Voltage Balancing and Fluctuation-Suppression Methods of Floating Capacitors in a New Modular Multilevel Converter. *IEEE Transactions on Industrial Electronics*, **2013**, 60, 1943-1954	8.9	225
48	Voltage balancing control of a four-level hybrid-clamped inverter using modified phase-shifted PWM **2013**,		3
47	A novel MPC flux weakening method for induction motor applied in electric wheel **2013**,		2
46	Online Identification of Permanent Magnet Flux Based on Extended Kalman Filter for IPMSM Drive With Position Sensorless Control. *IEEE Transactions on Industrial Electronics*, **2012**, 59, 4169-4178	8.9	169
45	Multi-objective optimization PWM control for a back-to-back five-level ANPC converter **2012**,		5
44	Power balancing control of a multilevel converter using high-frequency multi-winding transformer **2012**,		3
43	Novel adaptive power control of a Direct-drive PM wind generation system in a micro grid **2012**,		6
42	A Transformer-Less High-Power Converter for Large Permanent Magnet Wind Generator Systems. *IEEE Transactions on Sustainable Energy*, **2012**, 3, 318-329	8.2	66
41	Torque Ripple Reduction of the Torque Predictive Control Scheme for Permanent-Magnet Synchronous Motors. *IEEE Transactions on Industrial Electronics*, **2012**, 59, 871-877	8.9	124

40	Modeling and control strategy for cascade bi-directional DC/DC converter in Microgrid **2012**,		1
39	A novel hybrid-clamped four-level converter **2012**,		7
38	Voltage fluctuation suppression method of floating capacitors in a new modular multilevel converter **2011**,		8
37	Control strategies of DC-bus voltage in islanded operation of microgrid **2011**,		14
36	A neutral-point potential balancing algorithm for five-level ANPC converters **2011**,		6
35	A Converter-Based Starting Method and Speed Control of Doubly Fed Induction Machine With Centrifugal Loads. *IEEE Transactions on Industry Applications*, **2011**, 47, 1409-1418	4.3	25
34	Composite converter of hybrid storage in distributed renewable energy generation system **2011**,		6
33	A new adaptive flux weakening method of PMSM **2011**,		2
32	A control method for grid-friendly photovoltaic systems with hybrid energy storage units **2011**,		16
31	PI type dynamic decoupling control scheme for PMSM high speed operation **2010**,		16
30	Control of variable pitch, variable speed wind turbine in weak grid systems **2010**,		7
29	Energy management of hybrid DC and AC bus linked microgrid **2010**,		19
28	Voltage balancing control and experiments of a novel modular multilevel converter **2010**,		16
27	A transformerless modular permanent magnet wind generator system with minimum generator coils **2010**,		7
26	DC-link Voltage Control of a Full Power Converter for Wind Generator Operating in Weak-Grid Systems. *IEEE Transactions on Power Electronics*, **2009**, 24, 2178-2192	7.2	142
25	Sensor-less Drive of Induction Motor Based on A New Hybrid Cascaded Multilevel Inverter **2009**,		2
24	PIR-based control for three-phase PWM rectifier with H-bridge load **2009**,		1
23	Interior Permanent-Magnet Synchronous Motor Design for Improving Self-Sensing Performance at Very Low Speed. *IEEE Transactions on Industry Applications*, **2009**, 45, 1939-1946	4.3	41

LIST OF PUBLICATIONS