

Poh Chiang Andrew Loh

List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	Single-Source Cascaded Multilevel Inverter With Voltage-Boost Submodule and Continuous Input Current for Photovoltaic Applications. IEEE Transactions on Power Electronics, 2022, 37, 955-970.	7.9	16
2	A Direct Carrier-Based Modulation Scheme With Full Index Range for DC-Link Current Ripple Mitigation of a Current Source Converter. IEEE Transactions on Industrial Electronics, 2022, 69, 452-462.	7.9	15
3	A SiC-Si Hybrid Module for Direct Matrix Converter With Mitigated Current Spikes. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2022, 10, 3805-3817.	5.4	4
4	Review of Methodologies for Evaluating Short-Circuit Robustness and Reliability of SiC Power MOSFETs. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2022, 10, 4665-4679.	5.4	6
5	An Improved di/dt -RCD Detection for Short-Circuit Protection of SiC mosfet. IEEE Transactions on Power Electronics, 2021, 36, 12-17.	7.9	23
6	A Six-Switch Seven-Level Triple-Boost Inverter. IEEE Transactions on Power Electronics, 2021, 36, 1225-1230.	7.9	62
7	A Dual-Boost H -Bridge Inverter With Common Ground for Photovoltaic Interfacing. IEEE Transactions on Industrial Electronics, 2021, 68, 9515-9526.	7.9	11
8	Single-Stage Active Split-Source Inverter With High DC-Link Voltage Utilization. IEEE Transactions on Power Electronics, 2021, 36, 6699-6711.	7.9	13
9	Differential-Mode Filters With Common-Mode Neutral-Point-Balancing Accelerators for Single-Phase Symmetrical Five-Level Converters. IEEE Transactions on Power Electronics, 2021, 36, 9209-9220.	7.9	2
10	An Integrated Common-Mode Fast-Balancing Mechanism for Three-Phase Three-Level Converter With LCL Filter. IEEE Transactions on Power Electronics, 2021, 36, 12694-12709.	7.9	5
11	Modified split-source inverter with single-phase dual power decoupling. IET Power Electronics, 2020, 13, 2201-2211.	2.1	3
12	A Review of Traditional Helical to Recent Miniaturized Printed Circuit Board Rogowski Coils for Power-Electronic Applications. IEEE Transactions on Power Electronics, 2020, 35, 12207-12222.	7.9	52
13	Structure and modelling of four-layer screen-printed PCB Rogowski coil with very few turns for high-bandwidth SiC current measurement. IET Power Electronics, 2020, 13, 765-775.	2.1	21
14	Sliding-Mode Flux-Weakening Control With Only Single Current Regulator for Permanent Magnet Synchronous Motor. IEEE Access, 2019, 7, 131616-131626.	4.2	7
15	Two Degrees of Freedom Power Decoupling Method for Single-Phase Split-Source Inverter. , 2019, , .		3
16	Review and re-evaluation of modulation techniques for neutral-point-clamped inverters with high-order filters. IET Power Electronics, 2019, 12, 1307-1320.	2.1	9
17	A Natural-balancing Filter for Three-Level Grid-Connected Converter. , 2019, , .		6
18	Integrator Design of the Rogowski Current Sensor for Detecting Fast Switch Current of SiC Devices. , 2019, , .		13

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19	A Single-Stage Three-Phase Split-Y-Source Inverter. , 2019, , .		4
20	Benchmarking of Stability and Robustness Against Grid Impedance Variation for <i>LCL</i>-Filtered Grid-Interfacing Inverters. IEEE Transactions on Power Electronics, 2018, 33, 9033-9046.	7.9	86
21	Distributed Primary and Secondary Power Sharing in a Droop-Controlled LVDC Microgrid With Merged AC and DC Characteristics. IEEE Transactions on Smart Grid, 2018, 9, 2284-2294.	9.0	84
22	Graphical Evaluation of Time-Delay Compensation Techniques for Digitally Controlled Converters. IEEE Transactions on Power Electronics, 2018, 33, 2601-2614.	7.9	77
23	The SVC Additional Adaptive Voltage Controller of Isolated Wind-Diesel Power System Based on Double Sliding-Mode Optimal Strategy. IEEE Transactions on Sustainable Energy, 2018, 9, 24-34.	8.8	36
24	A Dual Active Bridge Converter With an Extended High-Efficiency Range by DC Blocking Capacitor Voltage Control. IEEE Transactions on Power Electronics, 2018, 33, 5949-5966.	7.9	71
25	Improved Power Decoupling Scheme for a Single-Phase Grid-Connected Differential Inverter With Realistic Mismatch in Storage Capacitances. IEEE Transactions on Power Electronics, 2017, 32, 186-199.	7.9	53
26	Resonance Interaction of Multiparallel Grid-Connected Inverters With LCL Filter. IEEE Transactions on Power Electronics, 2017, 32, 894-899.	7.9	130
27	Design and Analysis of Robust Active Damping for LCL Filters Using Digital Notch Filters. IEEE Transactions on Power Electronics, 2017, 32, 2360-2375.	7.9	239
28	Grid-Current-Feedback Control for LCL-Filtered Grid Converters With Enhanced Stability. IEEE Transactions on Power Electronics, 2017, 32, 3216-3228.	7.9	162
29	Passivity Enhancement of Grid-Tied Converters by Series LC-Filtered Active Damper. IEEE Transactions on Industrial Electronics, 2017, 64, 369-379.	7.9	57
30	Stability Analysis and Controller Synthesis for Single-Loop Voltage-Controlled VSIs. IEEE Transactions on Power Electronics, 2017, 32, 7394-7404.	7.9	118
31	An Active Trap Filter for Switching Harmonic Attenuation of Low-Pulse-Ratio Inverters. IEEE Transactions on Power Electronics, 2017, 32, 9078-9092.	7.9	14
32	Passivity-Based Stability Analysis and Damping Injection for Multiparalleled VSCs with LCL Filters. IEEE Transactions on Power Electronics, 2017, 32, 8922-8935.	7.9	174
33	An Improved Flux Observer for Field-Oriented Control of Induction Motors Based on Dual Second-Order Generalized Integrator Frequency-Locked Loop. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2017, 5, 513-525.	5.4	85
34	An Enhanced Dual Droop Control Scheme for Resilient Active Power Sharing Among Paralleled Two-Stage Converters. IEEE Transactions on Power Electronics, 2017, 32, 6091-6104.	7.9	32
35	A comparative benchmark of digital delay compensation techniques based on a graphical approach. , 2017, , .		1
36	Re-Investigation of Generalized Integrator Based Filters From a First-Order-System Perspective. IEEE Access, 2016, 4, 7131-7144.	4.2	82

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37	A series-ZC-filtered active trap filter for high power voltage source inverter. , 2016, , .		2
38	A unified impedance model of voltage-source converters with phase-locked loop effect. , 2016, , .		25
39	Realization of quadrature signal generator using accurate magnitude integrator. , 2016, , .		3
40	A new second-order generalized integrator based quadrature signal generator with enhanced performance. , 2016, , .		18
41	High Step-Up Trans-Inverse ($T_x^{\sup>1\sup>}$) DC-DC Converter for the Distributed Generation System. IEEE Transactions on Industrial Electronics, 2016, 63, 4278-4291.	7.9	48
42	A novel flux estimator based on SOGI with FLL for induction machine drives. , 2016, , .		6
43	Ultra-step-up DC-DC converter with integrated autotransformer and coupled inductor. , 2016, , .		11
44	Stability analysis and controller synthesis for digital single-loop voltage-controlled inverters. , 2016, , .		3
45	Four new applications of Second-Order Generalized Integrator Quadrature Signal Generator. , 2016, , .		7
46	An enhanced droop control scheme for resilient active power sharing in paralleled two-stage PV inverter systems. , 2016, , .		4
47	Impedance interactions in bidirectional cascaded converter. IET Power Electronics, 2016, 9, 2482-2491.	2.1	19
48	Loading Analysis of Modular Multi-level Converter for Offshore High-voltage DC Application under Various Grid Faults. Electric Power Components and Systems, 2016, 44, 2007-2016.	1.8	0
49	Input current interharmonics in adjustable speed drives caused by fixed-frequency modulation techniques. , 2016, , .		3
50	Droop Control With Improved Disturbance Adaption for a PV System With Two Power Conversion Stages. IEEE Transactions on Industrial Electronics, 2016, 63, 6073-6085.	7.9	54
51	Multiuser Communication Through Power Talk in DC MicroGrids. IEEE Journal on Selected Areas in Communications, 2016, 34, 2006-2021.	14.0	23
52	An Improved Second-Order Generalized Integrator Based Quadrature Signal Generator. IEEE Transactions on Power Electronics, 2016, 31, 8068-8073.	7.9	213
53	Effects of Passive Components on the Input Current Interharmonics of Adjustable-Speed Drives. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2016, 4, 152-161.	5.4	24
54	Modulation Schemes for Single-Phase B6 Converters With Two Asymmetrical Terminal Voltages. IEEE Transactions on Industrial Electronics, 2016, 63, 49-59.	7.9	3

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55	Design of LCL Filters With LCL Resonance Frequencies Beyond the Nyquist Frequency for Grid-Connected Converters. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2016, 4, 3-14.	5.4	119
56	Lifetime Estimation of MMC for Offshore Wind Power HVDC Application. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2016, 4, 504-511.	5.4	107
57	Benchmark of AC and DC Active Power Decoupling Circuits for Second-Order Harmonic Mitigation in Kilowatt-Scale Single-Phase Inverters. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2016, 4, 15-25.	5.4	102
58	Highly Reliable Transformerless Photovoltaic Inverters With Leakage Current and Pulsating Power Elimination. IEEE Transactions on Industrial Electronics, 2016, 63, 1016-1026.	7.9	169
59	<i>LLCL</i> -Filtered Grid Converter With Improved Stability and Robustness. IEEE Transactions on Power Electronics, 2016, 31, 3958-3967.	7.9	69
60	Highly Accurate Derivatives for <i>LCL</i> -Filtered Grid Converter With Capacitor Voltage Active Damping. IEEE Transactions on Power Electronics, 2016, 31, 3612-3625.	7.9	190
61	Four-Leg Converters With Improved Common Current Sharing and Selective Voltage-Quality Enhancement for Islanded Microgrids. IEEE Transactions on Power Delivery, 2016, 31, 522-531.	4.3	51
62	Modulation Schemes With Enhanced Switch Thermal Distribution for Single-Phase AC-DC-AC Reduced-Switch Converters. IEEE Transactions on Power Electronics, 2016, 31, 3302-3313.	7.9	15
63	Active Damping of <i>LLCL</i> -Filter Resonance Based on <i>LC</i> -Trap Voltage or Current Feedback. IEEE Transactions on Power Electronics, 2016, 31, 2337-2346.	7.9	44
64	Grid-Current-Feedback Active Damping for <i>LCL</i> Resonance in Grid-Connected Voltage-Source Converters. IEEE Transactions on Power Electronics, 2016, 31, 213-223.	7.9	342
65	Modulation schemes with enhanced switch thermal distribution for single-phase AC-DC-AC reduced-switch converters. , 2015, , .		0
66	Power Talk: How to Modulate Data over a DC Micro Grid Bus Using Power Electronics. , 2015, , .		15
67	Stability Analysis and Active Damping for <i>LLCL</i> -Filter-Based Grid-Connected Inverters. IEEE Journal of Industry Applications, 2015, 4, 187-195.	1.1	13
68	Online Fault Identification Based on an Adaptive Observer for Modular Multilevel Converters Applied to Wind Power Generation Systems. Energies, 2015, 8, 7140-7160.	3.1	27
69	DQ reference frame modeling and control of single-phase active power decoupling circuits. , 2015, , .		13
70	Trans-Z-source and \hat{i} -Z-source neutral-point-clamped inverters. IET Power Electronics, 2015, 8, 371-377.	2.1	37
71	A series-LC-filtered active damper for ac power electronics based power systems. , 2015, , .		1
72	Current control of grid converters connected with series ac capacitor. , 2015, , .		3

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73	Indirect thermal control for improved reliability of Modular Multilevel Converter by utilizing circulating current. , 2015, , .		31
74	Impedance analysis of control modes in cascaded converter. , 2015, , .		0
75	Passivity enhancement of grid-tied converter by series LC-filtered active damper. , 2015, , .		7
76	Quasi-Y-source inverter. , 2015, , .		17
77	Trans-inverse (T_{x1}) high step-up DC-DC converter. , 2015, , .		0
78	Power decoupling with autonomous reference generation for single-phase differential inverters. , 2015, , .		18
79	Enhanced stability of capacitor-current feedback active damping for LCL-filtered grid converters. , 2015, , .		2
80	Line-to-line voltage based modulation scheme for single-phase reduced switch ac-dc-ac converters to achieve improved performance. , 2015, , .		0
81	The feasibility study on thermal loading control of wind power converters with a flexible switching frequency. , 2015, , .		8
82	Influence of modulation method on using LC-traps with single-phase voltage source inverters. , 2015, , .		3
83	A Dual Voltage Control Strategy for Single-Phase PWM Converters With Power Decoupling Function. IEEE Transactions on Power Electronics, 2015, 30, 7060-7071.	7.9	128
84	Application Criteria for Nine-Switch Power Conversion Systems with Improved Thermal Performance. IEEE Transactions on Power Electronics, 2015, 30, 4608-4620.	7.9	43
85	Virtual-Impedance-Based Control for Voltage-Source and Current-Source Converters. IEEE Transactions on Power Electronics, 2015, 30, 7019-7037.	7.9	458
86	Quasi-Y-Source Boost DC-DC Converter. IEEE Transactions on Power Electronics, 2015, 30, 6514-6519.	7.9	79
87	Realization of Digital Differentiator Using Generalized Integrator For Power Converters. IEEE Transactions on Power Electronics, 2015, 30, 6520-6523.	7.9	53
88	Sub-module Short Circuit Fault Diagnosis in Modular Multilevel Converter Based on Wavelet Transform and Adaptive Neuro Fuzzy Inference System. Electric Power Components and Systems, 2015, 43, 1080-1088.	1.8	32
89	Active damping of LLCL-filter resonance based on LC-trap voltage and capacitor current feedback. , 2015, , .		10
90	Design of LLCL-filter for grid-connected converter to improve stability and robustness. , 2015, , .		12

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91	A Rotating Speed Controller Design Method for Power Leveling by Means of Inertia Energy in Wind Power Systems. IEEE Transactions on Energy Conversion, 2015, 30, 1052-1060.	5.2	19
92	Design of the LC + trap filter for a current source rectifier. , 2015, , .		4
93	Design of LCL-filters with LCL resonance frequencies beyond the Nyquist frequency for grid-connected inverters. , 2015, , .		7
94	Benchmark of AC and DC active power decoupling circuits for second-order harmonic mitigation in kW-scale single-phase inverters. , 2015, , .		13
95	High-performance feedback-type active damping of LCL-filtered voltage source converters. , 2015, , .		16
96	Interaction and aggregated modeling of multiple paralleled inverters with LCL filter. , 2015, , .		24
97	Passivity-based design of passive damping for LCL-filtered voltage source converters. , 2015, , .		12
98	Improvement of device current ratings in Modular Multilevel Converter by utilizing circulating current. , 2015, , .		7
99	Design of state observer for modular multilevel converter. , 2015, , .		17
100	An analysis method for harmonic resonance and stability of multi-paralleled LCL-filtered inverters. , 2015, , .		21
101	A unified active damping control for single-phase differential mode buck inverter with LCL-filter. , 2015, , .		21
102	SOGI-based capacitor voltage feedback active damping in LCL-filtered grid converters. , 2015, , .		1
103	An active trap filter for high-power voltage source converters. , 2015, , .		4
104	A unified grid current control for grid-interactive DG inverters in microgrids. , 2015, , .		3
105	Quasi Y-source boost DC-DC converter. , 2015, , .		8
106	Power decoupling method for single phase differential buck converter. , 2015, , .		14
107	A Series-<i>LC</i>-Filtered Active Damper With Grid Disturbance Rejection for AC Power-Electronics-Based Power Systems. IEEE Transactions on Power Electronics, 2015, 30, 4037-4041.	7.9	87
108	Y-Source Boost DC/DC Converter for Distributed Generation. IEEE Transactions on Industrial Electronics, 2015, 62, 1059-1069.	7.9	109

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109	Decoupling of Fluctuating Power in Single-Phase Systems Through a Symmetrical Half-Bridge Circuit. IEEE Transactions on Power Electronics, 2015, 30, 1855-1865.	7.9	245
110	Virtual γ -RC Damping of γ -LCL-Filtered Voltage Source Converters With Extended Selective Harmonic Compensation. IEEE Transactions on Power Electronics, 2015, 30, 4726-4737.	7.9	271
111	Power loss benchmark of nine-switch converters in three-phase online-UPS application. , 2014, , .		7
112	Lifetime estimation of MMC for offshore wind power HVDC application. , 2014, , .		4
113	Proportional derivative based stabilizing control of paralleled grid converters with cables in renewable power plants. , 2014, , .		29
114	Control of hybrid AC/DC microgrid under islanding operational conditions. Journal of Modern Power Systems and Clean Energy, 2014, 2, 223-232.	5.4	100
115	Investigation into the control methods to reduce the DC-link capacitor ripple current in a back-to-back converter. , 2014, , .		24
116	A dual voltage control strategy for single-phase PWM converters with power decoupling function. , 2014, , .		16
117	Interharmonic analysis and mitigation in adjustable speed drives. , 2014, , .		7
118	Evaluation of current stresses in nine-switch energy conversion systems. IET Power Electronics, 2014, 7, 2877-2886.	2.1	14
119	Generalized modular multilevel converter and modulation. , 2014, , .		1
120	Y-source impedance-network-based isolated boost DC/DC converter. , 2014, , .		7
121	Effects of leakage inductances on magnetically-coupled impedance-source networks. , 2014, , .		3
122	Magnetically coupled high-gain γ -source isolated DC/DC converter. IET Power Electronics, 2014, 7, 2817-2824.	2.1	29
123	High-voltage boost quasi-Z-source isolated DC/DC converter. IET Power Electronics, 2014, 7, 2387-2395.	2.1	55
124	Resonant-inductor-voltage-feedback active damping based control for grid-connected inverters with LLCL-filters. , 2014, , .		9
125	Cost-based droop scheme for DC microgrid. , 2014, , .		40
126	Autonomous operation of distributed storages in microgrids. IET Power Electronics, 2014, 7, 23-30.	2.1	19

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127	Stability analysis and active damping for LLCL-filter based grid-connected inverters. , 2014, , .		14
128	Y-Source Impedance Network. IEEE Transactions on Power Electronics, 2014, 29, 3250-3254.	7.9	195
129	Reliability-oriented energy storage sizing in wind power systems. , 2014, , .		3
130	An impedance-based stability analysis method for paralleled voltage source converters. , 2014, , .		47
131	Autonomous economic operation of grid connected DC microgrid. , 2014, , .		15
132	Loss comparison of different nine-switch and twelve-switch energy conversion systems. , 2014, , .		2
133	A high voltage gain quasi Z-source isolated DC/DC converter. , 2014, , .		3
134	Cost-based droop scheme with lower generation costs for microgrids. IET Power Electronics, 2014, 7, 1171-1180.	2.1	52
135	The overview of damping methods for three-phase grid-tied inverter with LLCL-filter. , 2014, , .		7
136	Y-source impedance network. , 2014, , .		33
137	Decoupling of fluctuating power in single-phase systems through a symmetrical half-bridge circuit. , 2014, , .		16
138	Design-oriented analysis of resonance damping and harmonic compensation for LCL-filtered voltage source converters. , 2014, , .		8
139	Y-source inverter. , 2014, , .		27
140	Effects of Leakage Inductances on Magnetically Coupled Y-Source Network. IEEE Transactions on Power Electronics, 2014, 29, 5662-5666.	7.9	63
141	Power Talk: How to Modulate Data over a DC Micro Grid Bus Using Power Electronics. , 2014, , .		3
142	Autonomous operation of ac-dc microgrids with minimised interlinking energy flow. IET Power Electronics, 2013, 6, 1650-1657.	2.1	47
143	Review of fault diagnosis and fault-tolerant control for modular multilevel converter of HVDC. , 2013, , .		22
144	Cost-prioritized droop schemes for autonomous microgrids. , 2013, , .		8