

Ivo Barbi

List of Publications by Year in descending order

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152
papers

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156
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1935
citing authors

#	ARTICLE	IF	CITATIONS
1	Self-balancing of the clamping-capacitor-voltages in the multilevel capacitor-clamping-inverter under sub-harmonic PWM modulation. IEEE Transactions on Power Electronics, 2001, 16, 256-263.	7.9	156
2	Isolated DC-DC converters with high-output voltage for TWTA telecommunication satellite applications. IEEE Transactions on Power Electronics, 2003, 18, 975-984.	7.9	128
3	Three-Phase Cascaded Multilevel Inverter Using Power Cells With Two Inverter Legs in Series. IEEE Transactions on Industrial Electronics, 2010, 57, 2605-2612.	7.9	122
4	A Control Strategy for Parallel Operation of Single-Phase Voltage Source Inverters: Analysis, Design and Experimental Results. IEEE Transactions on Industrial Electronics, 2013, 60, 2194-2204.	7.9	108
5	A double ZVS-PWM active-clamping forward converter: analysis, design, and experimentation. IEEE Transactions on Power Electronics, 2001, 16, 745-751.	7.9	100
6	Three-level zero-voltage switching pulse-width modulation DC-DC boost converter with active clamping. IET Power Electronics, 2010, 3, 345.	2.1	96
7	A Three-Phase ZVS PWM DC/DC Converter With Asymmetrical Duty Cycle for High Power Applications. IEEE Transactions on Power Electronics, 2005, 20, 370-377.	7.9	89
8	Isolated Three-Phase High Power Factor Rectifier Based on the SEPIC Converter Operating in Discontinuous Conduction Mode. IEEE Transactions on Power Electronics, 2013, 28, 4962-4969.	7.9	77
9	DC-DC Converter: Four Switches $V_{rm\ pk}=V_{in}/2$, Capacitive Turn-Off Snubbing, ZV Turn-On. IEEE Transactions on Power Electronics, 2004, 19, 918-927.	7.9	74
10	Harmonic Voltage Reduction Using a Series Active Filter Under Different Load Conditions. IEEE Transactions on Power Electronics, 2006, 21, 1394-1402.	7.9	74
11	DC-DC Converter for Dual-Voltage Automotive Systems Based on Bidirectional Hybrid Switched-Capacitor Architectures. IEEE Transactions on Industrial Electronics, 2015, 62, 3296-3304.	7.9	74
12	A Three-Phase Current-Fed Push-Pull DC-DC Converter. IEEE Transactions on Power Electronics, 2009, 24, 358-368.	7.9	72
13	Three-Phase Multilevel PWM Rectifiers Based on Conventional Bidirectional Converters. IEEE Transactions on Power Electronics, 2010, 25, 545-549.	7.9	71
14	A Three-Phase Step-Up DC-DC Converter With a Three-Phase High-Frequency Transformer for DC Renewable Power Source Applications. IEEE Transactions on Industrial Electronics, 2011, 58, 3567-3580.	7.9	71
15	A 1-kW Step-Up/Step-Down Switched-Capacitor AC-AC Converter. IEEE Transactions on Power Electronics, 2013, 28, 3329-3340.	7.9	69
16	A 12 kW Three-Phase Low THD Rectifier With High-Frequency Isolation and Regulated DC Output. IEEE Transactions on Power Electronics, 2004, 19, 371-377.	7.9	65
17	Input-Series and Output-Series Connected Modular Output Capacitor Full-Bridge PWM DC-DC Converter. IEEE Transactions on Industrial Electronics, 2015, 62, 6213-6221.	7.9	65
18	A Three-Phase ZVS PWM DC/DC Converter With Asymmetrical Duty Cycle Associated With a Three-Phase Version of the Hybrid Rectifier. IEEE Transactions on Power Electronics, 2005, 20, 354-360.	7.9	61

#	ARTICLE	IF	CITATIONS
19	Multilevel Buck/Boost-Type DC-DC Converter for High-Power and High-Voltage Application. IEEE Transactions on Industry Applications, 2014, 50, 3931-3942.	4.9	57
20	Direct AC-AC Converters Using Commercial Power Modules Applied to Voltage Restorers. IEEE Transactions on Industrial Electronics, 2011, 58, 278-288.	7.9	56
21	A novel uninterruptible power supply system with active power factor correction. IEEE Transactions on Power Electronics, 2002, 17, 405-412.	7.9	55
22	A Switched-Capacitor Three-Phase AC-AC Converter. IEEE Transactions on Industrial Electronics, 2015, 62, 735-745.	7.9	53
23	A 600-W Switched-Capacitor AC-AC Converter for 220 V/110 V and 110 V/220 V Applications. IEEE Transactions on Power Electronics, 2012, 27, 4821-4826.	7.9	47
24	A ZVS-PWM Three-Phase Current-Fed Push-Pull DC-DC Converter. IEEE Transactions on Industrial Electronics, 2013, 60, 838-847.	7.9	45
25	Analysis and Implementation of a Hybrid High-Power-Factor Three-Phase Unidirectional Rectifier. IEEE Transactions on Power Electronics, 2009, 24, 632-640.	7.9	44
26	A Family of High-Voltage Gain Single-Phase Hybrid Switched-Capacitor PFC Rectifiers. IEEE Transactions on Power Electronics, 2015, 30, 4189-4198.	7.9	44
27	Unity Power Factor Isolated Three-Phase Rectifier With Split DC-Bus Based on the Scott Transformer. IEEE Transactions on Power Electronics, 2008, 23, 1278-1287.	7.9	43
28	A ZVS PWM Half-Bridge Voltage Source Inverter With Active Clamping. IEEE Transactions on Industrial Electronics, 2007, 54, 2665-2672.	7.9	40
29	Three-Phase DC-AC Converter Using Four-State Switching Cell. IEEE Transactions on Power Electronics, 2011, 26, 1857-1867.	7.9	39
30	Space Vector Modulation Applied to Three-Phase Three-Switch Two-Level Unidirectional PWM Rectifier. IEEE Transactions on Power Electronics, 2007, 22, 2245-2252.	7.9	37
31	Three-Phase Three-Level PWM DC-DC Converter. IEEE Transactions on Power Electronics, 2011, 26, 1847-1856.	7.9	34
32	A Three-Phase Multilevel Hybrid Switched-Capacitor PWM PFC Rectifier for High-Voltage-Gain Applications. IEEE Transactions on Power Electronics, 2016, 31, 3495-3505.	7.9	34
33	DSP-Based Control for Parallelism of Three-Phase Voltage Source Inverter. IEEE Transactions on Industrial Informatics, 2013, 9, 749-759.	11.3	33
34	Input-series and output-series connected modular single-switch flyback converter operating in the discontinuous conduction mode. IET Power Electronics, 2016, 9, 1962-1970.	2.1	31
35	Passive Regenerative and Dissipative Snubber Cells for Isolated SEPIC Converters: Analysis, Design, and Comparison. IEEE Transactions on Power Electronics, 2017, 32, 9210-9222.	7.9	30
36	Three-phase multilevel bidirectional DC-AC converter using three-phase coupled inductors. , 2009, , .		29

#	ARTICLE	IF	CITATIONS
37	New Step-Up/Step-Down DC-AC Converter. IEEE Transactions on Power Electronics, 2014, 29, 4512-4520.	7.9	28
38	Reduced Switch Count Step-Up/Step-Down Switched-Capacitor Three-Phase AC-AC Converter. IEEE Transactions on Industrial Electronics, 2018, 65, 8422-8432.	7.9	26
39	Three-Phase Push-Pull DC-DC Converter: Analysis, Design, and Experimentation. IEEE Transactions on Industrial Electronics, 2012, 59, 4629-4636.	7.9	25
40	Unity Power Factor Isolated Three-Phase Rectifier With Two Single-Phase Buck Rectifiers Based on the Scott Transformer. IEEE Transactions on Power Electronics, 2011, 26, 2688-2696.	7.9	22
41	High Voltage Power Supply Using a T-Type Parallel Resonant DC-DC Converter. IEEE Transactions on Industry Applications, 2018, 54, 2459-2470.	4.9	22
42	A Single-Phase High-Power-Factor Rectifier, Based on a Two-Quadrant Shunt Active Filter. IEEE Transactions on Power Electronics, 2011, 26, 3131-3143.	7.9	21
43	Reversible unity power factor step-up/step-down AC-DC converter controlled by sliding mode. IEEE Transactions on Power Electronics, 2001, 16, 223-230.	7.9	20
44	Bidirectional Current-Fed Flyback-Push-Pull DC-DC Converter. , 2011, , .		18
45	Three-Phase Weinberg Isolated DC-DC Converter: Analysis, Design, and Experimentation. IEEE Transactions on Industrial Electronics, 2012, 59, 888-896.	7.9	17
46	Modular Two-Switch Flyback Converter and Analysis of Voltage-Balancing Mechanism for Input-Series and Output-Series Connection. IEEE Transactions on Power Electronics, 2019, 34, 8317-8328.	7.9	17
47	Zero-voltage switching for the neutral-point-clamped (NPC) inverter. IEEE Transactions on Industrial Electronics, 2002, 49, 800-808.	7.9	16
48	Drive for a Symmetrical Two-Phase Induction Machine Using Vector Modulation. IEEE Transactions on Industry Applications, 2006, 126, 835-840.	0.2	16
49	Three-phase NPC inverter using three-phase coupled inductor. , 2009, , .		16
50	Space Vector Modulation for Two-Level Unidirectional PWM Rectifiers. IEEE Transactions on Power Electronics, 2010, 25, 178-187.	7.9	16
51	Split-phase switched-capacitor ac-ac converter. IET Power Electronics, 2015, 8, 918-928.	2.1	15
52	Modeling, Digital Control, and Implementation of a Three-Phase Four-Wire Power Converter Used as a Power Redistribution Device. IEEE Transactions on Industrial Informatics, 2016, 12, 1035-1042.	11.3	14
53	Solid-State Transformer for Power Distribution Grid Based on a Hybrid Switched-Capacitor LLC-SRC Converter: Analysis, Design, and Experimentation. IEEE Access, 2020, 8, 141182-141207.	4.2	14
54	A Three-Phase AC-AC Converter in Open-Delta Connection Based on Switched Capacitor Principle. IEEE Transactions on Industrial Electronics, 2015, 62, 6035-6041.	7.9	13

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55	A New Three-Level Quadratic (T-LQ) DC-DC Converter Suitable for Fuel Cell Applications. IEEJ Transactions on Industry Applications, 2008, 128, 459-467.	0.2	12
56	Three-phase single stage AC-DC Buck-Boost converter operating in Buck and Boost modes. , 2011, , .		12
57	An isolated DC-DC converter with high-output-voltage for a TWTA. , 2014, , .		12
58	AC-AC Hybrid Boost Switched-Capacitor Converter. IEEE Transactions on Power Electronics, 2020, 35, 13115-13125.	7.9	12
59	Three-phase Cascaded multilevel inverter using power cells with two inverter legs in series. , 2009, , .		11
60	A high step-up gain DC-DC converter based on the stacking of three conventional buck boost DC-DC converters. , 2011, , .		11
61	Multilevel buck dc-dc converter for high voltage application. , 2012, , .		11
62	Isolated AC/AC Converter With LLC Resonant Converter High-Frequency Link and Four-Quadrant Switches in the Output Stage. IEEE Access, 2020, 8, 213104-213114.	4.2	11
63	A New Hybrid High Power Factor Three-Phase Unidirectional Rectifier. , 2006, , .		10
64	Study of a single stage buck-boost three-phase rectifier with high power factor operating in discontinuous conduction mode (DCM). , 2009, , .		10
65	Isolated Zeta-SEPIC bidirectional dc-dc converter with active-clamping. , 2013, , .		10
66	Switched-Capacitor LLC Resonant DC-DC Converter With Switch Peak Voltage of $V_{in}/2$. IEEE Access, 2020, 8, 111504-111513.	4.2	10
67	Method for Deriving Transformerless Common-Ground Voltage Source Inverter Topologies. IEEE Transactions on Power Electronics, 2022, 37, 10821-10832.	7.9	10
68	A Single-Stage High-Frequency Isolated Three-Phase AC/DC Converter. Industrial Electronics Society (IECON), Annual Conference of IEEE, 2006, , .	0.0	9
69	A control strategy by instantaneous average values for parallel operation of single phase voltage source inverters based in the inductor current feedback. , 2009, , .		9
70	Modelling, control and realisation of the single-ended forward converter with resonant reset at the secondary side. IET Power Electronics, 2015, 8, 2097-2106.	2.1	9
71	A T-Type Isolated Zero Voltage Switching DC-DC Converter With Capacitive Output. IEEE Transactions on Power Electronics, 2017, 32, 4210-4218.	7.9	9
72	High static gain single-phase PFC based on a hybrid boost converter. International Journal of Electronics, 2017, 104, 821-839.	1.4	9

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73	Nonisolated high step-up stacked dc-dc converter based on boost converter elements for high power application. , 2011, , .		8
74	A ZVS-PWM T-type isolated DC-DC converter. , 2015, , .		8
75	A ZVS APWM Half-Bridge Parallel Resonant DC-DC Converter With Capacitive Output. IEEE Transactions on Industrial Electronics, 2019, 66, 5231-5241.	7.9	8
76	Three-level quadratic non-insulated basic DC-DC converters. , 2007, , .		7
77	A control strategy for parallel operation of single phase voltage source inverters. , 2009, , .		7
78	A single-stage three-phase high power factor rectifier with high-frequency isolation and regulated DC-bus based on the DCM SEPIC converter. , 2011, , .		6
79	Multilevel boost DC-DC converter derived from basic double-boost converter. , 2013, , .		6
80	Soft Commutation Isolated DC-DC Converters. Power Systems, 2019, , .	0.5	6
81	Double-coupled current-fed push-pull DC/DC converter: Analysis and experimentation. , 2009, , .		5
82	A single stage buck-boost three-phase rectifier with high power factor operating in continuous conduction mode (CCM). , 2011, , .		5
83	High power factor three-phase rectifier with two interleaved single-phase buck rectifier. , 2011, , .		5
84	Direct buck-type AC/AC converter based on switched-capacitor. , 2013, , .		5
85	Capacitor voltage balancing control of multilevel DC-DC converter. , 2013, , .		5
86	Three-Phase Flyback Push-Pull DC-DC Converter: Analysis, Design, and Experimentation. IEEE Transactions on Power Electronics, 2013, 28, 1961-1970.	7.9	5
87	Series-series association of two Dual Active Bridge (DAB) converters. , 2015, , .		5
88	A Control Strategy for Four-Wire Shunt Active Filters Using Instantaneous Active and Reactive Current Method. , 2006, , .		4
89	Three-phase series-buck rectifier with split DC-bus based on the Scott transformer. Power Electronics Specialist Conference (PESC), IEEE, 2008, , .	0.0	4
90	A Bidirectional PWM Three-Phase Step-Down Rectifier Based on the Differential-Mode Power Conversion Principle. IEEE Transactions on Power Electronics, 2009, 24, 2951-2958.	7.9	4

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91	A non-insulated resonant boost converter. , 2010, , .		4
92	High-output-voltage single-phase UPS based on series connection of low-output-voltage modular UPS. , 2011, , .		4
93	Input-series and output-series connected modular full-bridge PWM DC-DC converter with capacitive output filter and common duty cycle. , 2014, , .		4
94	Three-phase isolated DCM SEPIC converter for high voltage applications. , 2016, , .		4
95	Input-Series and Output-Series connected modular two-switch flyback converters operating in ccm. , 2016, , .		4
96	AC-AC Hybrid Switched-Capacitor Series Resonant Converter. , 2018, , .		4
97	AC-DC Bidirectional Single-Phase Step-Down Converter with High Power Factor. Industrial Electronics Society (IECON), Annual Conference of IEEE, 2006, , .	0.0	3
98	Three-phase multi-level DC-AC converter using three-phase, coupled inductors. , 2009, , .		3
99	Resonant circuit model and design for a high frequency high voltage switched-mode power supply. , 2009, , .		3
100	Three-phase active power filter based on the four states commutation cell DC-AC converter. Design and implementation. , 2013, , .		3
101	Output Characteristics of Two-Switch Flyback including the leakage inductance. , 2015, , .		3
102	A new half-bridge Hybrid Switched-Capacitor inverter. , 2015, , .		3
103	Modular inverter topology with full-bridge sub-modules for open-end split winding three-phase induction motor drive. , 2015, , .		3
104	A Bidirectional AC/AC Series Resonant Converter with High Frequency Link. , 2018, , .		3
105	A ISOP AC-AC Hybrid Switched-Capacitor SRC for Solid State Transformer Applications. , 2019, , .		3
106	Power Conservative Equivalent Circuit for DC Networks. IEEE Access, 2020, 8, 113667-113674.	4.2	3
107	A Theorem on Power Superposition in Resistive Networks. IEEE Transactions on Circuits and Systems II: Express Briefs, 2021, 68, 2362-2363.	3.0	3
108	Series Loss-Free Resistor: Analysis, Realization, and Applications. IEEE Transactions on Power Electronics, 2021, 36, 12857-12866.	7.9	3

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109	Power Redistributor Applied to Distribution Transformers. Industrial Electronics Society (IECON), Annual Conference of IEEE, 2006, , .	0.0	2
110	Voltage-fed three-phase push-pull dc-dc converter. , 2009, , .		2
111	Isolated single-phase high power factor rectifier using Zeta converter operating in DCM with non-dissipative snubber. , 2013, , .		2
112	Full bridge zero-voltage-switching PWM dc-dc converter with output capacitive filter. , 2015, , .		2
113	Experimental validation of a proposal for a 3.5 kVA three-phase magnetic-less solid-state autotransformer (SSAT) based on the switched-capacitor principle. , 2015, , .		2
114	A high step-up non-isolated DC-DC converter based on the integration of conventional boost converters. , 2016, , .		2
115	New topology for a single-phase buck-boost inverter. , 2018, , .		2
116	Comprehensive Analysis of a Flyback Converter for Voltage Equalization of Battery Strings. , 2018, , .		2
117	LLC Resonant Converter. Power Systems, 2019, , 141-186.	0.5	2
118	Three-phase cascade multilevel inverter using commutation sub-cells. , 2009, , .		1
119	A control strategy for parallel voltage source inverters. , 2009, , .		1
120	Analysis and design of a three-phase high power factor rectifier based on the SEPIC converter operating in discontinuous conduction mode. , 2011, , .		1
121	A family of three-level DC-DC converters. , 2013, , .		1
122	A novel modular multilevel inverter for medium-voltage open-end split winding machines based on single-phase submodules with input-series connection. , 2015, , .		1
123	Minimum power losses operation for switched capacitor converters. , 2015, , .		1
124	T-type parallel resonant DC-DC converter for high voltage application. , 2016, , .		1
125	An active-clamping single-stage DC-AC flyback converter. , 2016, , .		1
126	A New Transformerless Photovoltaic Inverter with Common Mode Leakage Current Elimination. , 2018, , .		1

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127	SST Topology Based on the LLC Resonant Converter and Output Voltage Control by Auxiliary Module. , 2019, , .		1
128	Series Resonant Converter Operating Above the Resonant Frequency. Power Systems, 2019, , 115-139.	0.5	1
129	Acionamento do motor de indu��o bifa�sico sim�trico empregando modula�o vetorial. Controle and Automacao, 2006, 17, 356-363.	0.2	1
130	Novo Inversor Zvs Pwm Com Grampeamento Ativo Utilizando Um �nico Interruptor Auxiliar. Eletr�nica De Pot�ncia, 2024, 9, 45-52.	0.1	1
131	A ZVS PWM Inverter with Active Voltage Clamping Technique Using Only a Single Auxiliary Switch. IEEE Transactions on Industry Applications, 2005, 125, 767-773.	0.2	1
132	On The Study Of The Dynamics Of The Zvs Three-phase Dc/dc Converter. Eletr�nica De Pot�ncia, 2006, 11, 69-76.	0.1	1
133	Two Phase Voltage Inverter With Three Legs Operating In The Overmodulation Range. Eletr�nica De Pot�ncia, 2006, 11, 61-68.	0.1	1
134	A system for state-of-health diagnosis of lead-acid batteries integrated with a battery charger. Eletr�nica De Pot�ncia, 2012, 17, 401-408.	0.1	1
135	Bidirectional Flyback-push-pull Dc-dc Converter. Eletr�nica De Pot�ncia, 2024, 20, 195-204.	0.1	1
136	A novel three-phase three-level ZVS PWM DC-DC converter. , 2009, , .		0
137	A novel three-phase three-level ZVS PWM dc-dc converter. , 2010, , .		0
138	Steady-state analysis of a 5-level bidirectional buck+boost dc-dc converter. , 2013, , .		0
139	A five-phase PWM rectifier: Analysis, modeling, control and simulation. , 2015, , .		0
140	An improved modulation strategy for the high-frequency-isolated DC-AC flyback converter with differential output connection. , 2016, , .		0
141	DC-DC Hybrid Switched-Capacitor LLC Resonant Converter: All Switches With $V_{DS} = V_{in}/2$. , 2019, , .		0
142	Series Resonant Converter. Power Systems, 2019, , 33-69.	0.5	0
143	Basic Electric Circuits with Switches. Power Systems, 2019, , 1-31.	0.5	0
144	Half Bridge Capacitor Voltage-Clamped Series Resonant Converter. Power Systems, 2019, , 71-92.	0.5	0

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145	Full-Bridge ZVS-PWM Converter with Inductive Output Filter. Power Systems, 2019, , 219-243.	0.5	0
146	Three-Level Neutral Point Clamped ZVS-PWM Converter. Power Systems, 2019, , 245-269.	0.5	0
147	Unified Power Conservative Equivalent Circuit for DC Networks. IEEE Access, 2020, 8, 178230-178237.	4.2	0
148	Exact analysis of spontaneous phase synchronization of two identical coupled electrical linear LC oscillators. Revista Brasileira De Ensino De Fisica, 0, 43, .	0.2	0
149	Retificador trifásico isolado com correção do fator de potência empregando o conversor CC-CC sepic em condução contínua. Eletrônica De Potência, 2001, 6, 8-15.	0.1	0
150	Retificador trifásico isolado com alto fator de potência utilizando o conversor zeta no modo de condução contínua. Eletrônica De Potência, 2001, 6, 33-40.	0.1	0
151	Retificador trifásico isolado em alta frequência e com baixa distorção de corrente na rede. Eletrônica De Potência, 2002, 7, 22-29.	0.1	0
152	A high power factor hybrid three-phase rectifier with regenerative capability. Eletrônica De Potência, 2012, 17, 419-428.	0.1	0