

Luiz C G Freitas

List of Publications by Year in descending order

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114
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114
times ranked

580
citing authors

#	ARTICLE	IF	CITATIONS
1	A State Equation Model of a Single-Phase Grid-Connected Inverter Using a Droop Control Scheme With Extra Phase Shift Control Action. IEEE Transactions on Industrial Electronics, 2012, 59, 1527-1537.	7.9	90
2	Proposal of a Photovoltaic AC-Module With a Single-Stage Transformerless Grid-Connected Boost Microinverter. IEEE Transactions on Industrial Electronics, 2018, 65, 2289-2301.	7.9	41
3	Programmable PFC based hybrid multipulse power rectifier for ultra clean power application. IEEE Transactions on Power Electronics, 2006, 21, 959-966.	7.9	38
4	Power Electronics for Modern Sustainable Power Systems: Distributed Generation, Microgrids and Smart Grids—A Review. Sustainability, 2022, 14, 3597.	3.2	31
5	Performance Evaluation of a Novel Hybrid Multipulse Rectifier for Utility Interface of Power Electronic Converters. IEEE Transactions on Industrial Electronics, 2007, 54, 3030-3041.	7.9	28
6	Dual Transformerless Single-Stage Current Source Inverter With Energy Management Control Strategy. IEEE Transactions on Power Electronics, 2013, 28, 4644-4656.	7.9	26
7	Front-End Converter With Integrated PFC and DC-DC Functions for a Fuel Cell UPS With DSP-Based Control. IEEE Transactions on Power Electronics, 2015, 30, 4175-4188.	7.9	25
8	Optimized 12-Pulse Rectifier With Generalized Delta Connection Autotransformer and Isolated SEPIC Converters for Sinusoidal Input Line Current Imposition. IEEE Transactions on Power Electronics, 2019, 34, 3204-3213.	7.9	20
9	A novel programmable PFC based hybrid rectifier for ultra clean power application. , 0, , .		17
10	PEM fuel cell dynamic model for electronic circuit simulator. , 2009, , .		16
11	Novel true zero current turn-on and turn-off converter family: analysis and experimental results. IET Power Electronics, 2010, 3, 33.	2.1	16
12	Simulated Annealing - MPPT in Partially Shaded PV Systems. IEEE Latin America Transactions, 2016, 14, 235-241.	1.6	15
13	Analysis, Design, and Experimentation of a Double Forward Converter With Soft Switching Characteristics for All Switches. IEEE Transactions on Power Electronics, 2011, 26, 2137-2148.	7.9	14
14	New Hybrid High-Power Rectifier With Reduced THDI and Voltage-Sag Ride-Through Capability Using Boost Converter. IEEE Transactions on Industry Applications, 2013, 49, 2421-2436.	4.9	12
15	Low complexity system for real-time determination of current-voltage characteristic of PV modules and strings. , 2013, , .		12
16	Avalia�o de desempenho de modelos computacionais representativos de pain�is fotovoltaicos. Ciencia and Engenharia/ Science and Engineering Journal, 2016, 25, 145-154.	0.1	12
17	Modeling and control of a single-stage current source inverter with amplified sinusoidal output voltage. , 2012, , .		11
18	Design of an Internal Model Control strategy for single-phase grid-connected PWM inverters and its performance analysis with a non-linear local load and weak grid. ISA Transactions, 2016, 64, 373-383.	5.7	11

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19	The study and application of evaluation methods for photovoltaic modules under real operational conditions, in a region of the Brazilian Southeast. <i>Renewable Energy</i> , 2019, 138, 1189-1204.	8.9	11
20	Programmable PFC Based Hybrid Multipulse Power Rectifier for Utility Interface of Power Electronic Converters. , 0, , .		9
21	Zeta DC/DC converter used as led lamp drive. , 2007, , .		9
22	Proposal for preprogrammed control applied to a current-sensorless PFC boost converter. <i>Microprocessors and Microsystems</i> , 2014, 38, 443-450.	2.8	9
23	Current-sensorless PFC Boost converter with preprogrammed control strategy. , 2011, , .		8
24	Evaluation of a single-stage current source inverter with high-voltage gain supplied by a polymer electrolyte membrane fuel cell. <i>IET Power Electronics</i> , 2012, 5, 1834-1846.	2.1	8
25	DSP-Based Implementation of Control Strategy for Sinusoidal Input Line Current Imposition for a Hybrid Three-Phase Rectifier. <i>IEEE Transactions on Industrial Informatics</i> , 2013, 9, 1947-1963.	11.3	6
26	A single-stage three-port boost converter with high voltage gain based on the bidirectional version of the three-state switching cell. , 2015, , .		6
27	Design, analysis and performance of a bidirectional solar inverter with a global and independent maximum power extraction technique. <i>IET Power Electronics</i> , 2018, 11, 221-228.	2.1	6
28	A single-stage PFC converter applied as an electronic ballast for fluorescent lamps. , 0, , .		5
29	Lossless Commutated Boost Converter applied as a PFC Stage for Uninterruptible Power Supply System without Battery Charger. , 2007, , .		5
30	Single-phase high power factor hybrid rectifier suitable for high-power applications. <i>IET Power Electronics</i> , 2012, 5, 1137-1146.	2.1	5
31	Retrofitting technique to improve voltage sags ride-through capability of ASD using SEPIC rectifiers. , 2012, , .		5
32	Renewable uninterruptible power supply system deploying a single-phase front-end converter with integrated PFC and DC-DC functions. , 2015, , .		5
33	True zero current turn-on and turn-off converter family: Analysis, simulation and experimental results. <i>Power Electronics Specialist Conference (PESC), IEEE</i> , 2008, , .	0.0	4
34	Programmable AC power source used to analyze electronic equipment performance in the electrical power system quality concept. <i>IEEE Applied Power Electronics Conference and Exposition</i> , 2008, , .	0.0	4
35	Single-stage fuel-cell inverter with new control strategy. , 2010, , .		4
36	Didactic platform for teaching of three-phase rectifier circuits in power electronics. <i>International Journal of Electrical Engineering and Education</i> , 2014, 51, 279-291.	0.8	4

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37	Small-Signal Analysis of Parallel Connected Voltage Source Inverters Using a Frequency and Voltage Droop Control Including an Additional Phase Shift. <i>Journal of Control, Automation and Electrical Systems</i> , 2014, 25, 597-607.	2.0	4
38	Grid connected dc distribution network deploying high power density rectifier for dc voltage stabilization. , 2016, , .		4
39	A Non-Insulated Step-Up/Down DC-DC Converter with Wide Range Conversion. , 2009, , .		3
40	A New Electronic Ballast used to Drive one or more High-Pressure Sodium Lamps with Voltage Synthesized Waveform. , 2009, , .		3
41	Proposal of a dc-dc converter with wide conversion range used in photovoltaic systems and utility power grid for the universal voltage range. , 2010, , .		3
42	Hybrid three-phase rectifier with high power factor and voltage sags ride-through capability for utility interface of adjustable speed drives. , 2011, , .		3
43	An approach to improve power supply continuity throughout the estimation of insulated power cable life expectancy indexes. , 2011, , .		3
44	Multilevel inverter based on cascaded association of Buck EIE inverters. <i>IET Power Electronics</i> , 2013, 6, 1165-1174.	2.1	3
45	Design and modeling of a transformerless hybrid inverter system using a fuel cell as energy storage element for microgrids with sensitive loads. , 2015, , .		3
46	Single-stage Current Source Inverter With Amplified Sinusoidal Output Voltage: Analysis, Simulation and Experimental Results. <i>Eletr�nica De Pot�ncia</i> , 2024, 16, 222-232.	0.1	3
47	A novel single-phase HPF hybrid rectifier suitable for front-end trolleybus systems. , 2009, , .		2
48	Proposal of a DC-DC converter with wide conversion range used in photovoltaic systems and utility power grid for the universal voltage range. , 2009, , .		2
49	Dimming of fluorescent lamps by varying the duty cycle in electronic ballast with integrated boost converter to the half bridge inverter. , 2010, , .		2
50	Hybrid high-power rectifier with reduced THDI and voltage sag ride-through capability. , 2011, , .		2
51	Quadratic boost converter using a soft single switch. , 2013, , .		2
52	Novel transformerless single-stage 4-switches Buck-Boost Inverter. , 2013, , .		2
53	Internal Model Control design applied to single-phase grid-connected inverters. , 2015, , .		2
54	A bidirectional single-phase hybrid rectifier proposal for sinusoidal input current imposition, DC bus voltage regulation and active power injection onto the AC grid. , 2016, , .		2

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55	Analysis of a Single-Phase Hybrid Bidirectional Rectifier with Series Voltage Compensation in a Grid-Connected DC Microgrid. , 2019, , .		2
56	Proposta De Uma Família De Conversores Zcs Quase-ressonante. Eletrônica De Potência, 2024, 15, 31-44.	0.1	2
57	Proposta De Controle Prático-programado Aplicado Ao Conversor Boost Pfc Sem Sensor De Corrente. Eletrônica De Potência, 2024, 15, 150-157.	0.1	2
58	Performance Analysis of Methods at Estimating Insulated Cables Degradation. Renewable Energy and Power Quality Journal, 0, 1, 896-901.	0.2	2
59	Hosting Capacity Calculation Deploying a Hybrid Methodology: A Case Study Concerning the Intermittent Nature of Photovoltaic Distributed Generation and the Variable Nature of Energy Consumption in a Medium Voltage Distribution Network. Energies, 2022, 15, 1223.	3.1	2
60	Design and Development of an Online Smart Monitoring and Diagnosis System for Photovoltaic Distributed Generation. Energies, 2021, 14, 8552.	3.1	2
61	Implementation and Critical Analysis of the Active Phase Jump with Positive Feedback Anti-Islanding Algorithm. Energies, 2022, 15, 4609.	3.1	2
62	A new proposal of switched power oscillator with soft-commutation applied as a HPF electronic ballast. , 0, , .		1
63	A single switch double forward converter without commutation losses. , 2005, , .		1
64	A true programmable HPF hybrid three-phase rectifier. , 2008, , .		1
65	LED lamp driver using a converter with wide range conversion microcontroller-based. , 2008, , .		1
66	Proposal of a hybrid rectifier structure with HPF and low THD suitable for front-end trolleybuses systems supplied by AC distribution networks. , 2009, , .		1
67	HPF boost interleaved operating in discontinuous conduction mode for trolleybus application. , 2009, , .		1
68	New On-Off ZCS Double Forward Converter. , 2010, , .		1
69	DSP based switched reluctance motor/generator. , 2010, , .		1
70	DSP-based implementation of input line current imposition strategy for a single-phase hybrid rectifier. , 2011, , .		1
71	Turn-on turn-off zero-current-switching converter in power factor correction (PFC) application. , 2011, , .		1
72	Experimental analysis of a cascaded multilevel inverter using Buck EIE converters. , 2012, , .		1

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73	Proposal of a switched high dynamic series voltage regulator for compensating Sags and Swells on AC voltage source. , 2013, , .		1
74	FPGA applied to the control of DC-AC converters using repetitive and feedforward control laws. , 2017, , .		1
75	An alternative analysis of AC-AC PWM converter voltage stabilizer. , 2017, , .		1
76	Integration of Solar Photovoltaic (PV) Systems with CCM Inverters into VCM Droop-Controlled Islanded AC Microgrids. , 2019, , .		1
77	Design and Performance Analysis of Isolated Cuk Converter Employed in Multiple Pulse Rectifier Systems. , 2019, , .		1
78	Computational Implementation of Different Anti-Islanding Techniques Based on Frequency Drift for Distributed Generation Systems. , 2019, , .		1
79	Computational Implementation and Comparative Analysis of Phase-Locked Loop (PLL) Methods Under Different Power Quality Disturbances. , 2019, , .		1
80	PROPOSAL OF A NEW ACTIVE ANTI-ISLANDING STRATEGY BASED ON POSITIVE FREQUENCY FEEDBACK.. Eletr�nica De Pot�ncia, 2021, 26, 302-314.	0.1	1
81	A Novel High-power-factor Threephase Hybrid Multipulse Rectifier. Eletr�nica De Pot�ncia, 2005, 10, 17-24.	0.1	1
82	Microrredes: Estado da arte, desafios e tend�ncias para gera�o, distribui�o e uso sustent�vel de energia el�trica / Microgrids: State-of-the-art, challenges and trends for the sustainable generation, distribution and use of electricity. Brazilian Applied Science Review, 2020, 4, 3888-3906.	0.1	1
83	Design and Development of a Grid-Tied PV Inverter With GMPPT Technique and Reduced Number of Sensors. IEEE Access, 2022, 10, 48810-48823.	4.2	1
84	An electronic ballast for driving hid lamps controlled with a FPGA device. , 2007, , .		0
85	A proposal of a high performance controller for a single phase inverters with internal state feedback. , 2009, , .		0
86	Novel zero current turn-on and turn-off commutation cell. , 2009, , .		0
87	Single-phase high power hybrid front-end rectifier with soft-commutation. , 2010, , .		0
88	Novel proposal of multilevel inverter using Buck EIE converter. , 2010, , .		0
89	New control strategy applied to a CSI inverter with amplified sinusoidal output voltage: Analysis, simulation and experimental results. , 2010, , .		0
90	Uma nova abordagem para inversores multin�veis em cascata utilizando c�lulas de comuta�o EIE. , 2010, , .		0

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91	Conversor boost atuando como carga eletrônica a corrente controlada para fins de teste de uma célula a combustível. , 2010, , .		0
92	New approach on multilevel cascaded inverters using EIE commutation cells. , 2010, , .		0
93	Theoretical and simulation analysis of turn-on turn-off zero-current switching boost PFC. , 2011, , .		0
94	Novel proposal of hybrids rectifiers with voltage sag ride-through capability based on series DC voltage compensation technique. , 2013, , .		0
95	DC microgrid with bi-directional multistring solar inverter performing active power injection into the AC grid and DC bus voltage stabilization. , 2015, , .		0
96	A Performance Analysis of Active Anti-Islanding Methods Based on Frequency Drift. , 2019, , .		0
97	A Bridgeless Boost Half Bridge DC-DC Converter for Electrical and Hybrid Vehicle Applications. , 2019, , .		0
98	Analysis and Comparison of Bridgeless SEPIC Topologies operating in Discontinuous Conduction Mode for Power Factor Correction in Aircraft Power Systems. , 2021, , .		0
99	Evaluation of the Harmonic Current Injection Method for Sharing of Responsibilities for Voltage Harmonic Distortions at the Point of Common Coupling Deploying the Concept of Hybrid Rectifiers. , 2021, , .		0
100	Análise do desempenho das técnicas de modulação SVM, SPWM, Histerese no conteúdo harmônico de corrente e potência de operação de inversores conectados à rede. , 2021, , .		0
101	Proposal Of Modeling Water Tree Phenomenon For Insulated Cable. Eletrônica De Potência, 2011, 16, 138-146.	0.1	0
102	Converter with Wide Input Voltage Range Applied to Solid State Lighting Based on HV9930. Renewable Energy and Power Quality Journal, 0, , 1513-1518.	0.2	0
103	Hybrid High-power Rectifier With Reduced Thdi Using Boost Converter To Provide Voltage Sag Ride-through Capability. Eletrônica De Potência, 2012, 17, 609-622.	0.1	0
104	A real site application of a diagnose method at Estimating Insulated Cables Degradation using Non Linearity Indicators. Renewable Energy and Power Quality Journal, 0, , 1105-1110.	0.2	0
105	Analysis, Design And Implementation Of A Boost-buck Quadratic Converter Applied To An Lighting System Using Led Lamps. Eletrônica De Potência, 2013, 18, 1082-1090.	0.1	0
106	Analysis Of A Soft-single-switched Quadratic Boost Converter. Eletrônica De Potência, 2013, 18, 1047-1054.	0.1	0
107	Projeto de Controlador Baseado no Modelo Interno com 1 Grau de Liberdade Utilizado em Injeção de Potência Ativa na Rede Monofásica a Partir de Geração. Eletrônica De Potência, 2024, 20, 172-184.	0.1	0
108	Projeto de Controlador Baseado no Modelo Interno Utilizado em P&mppt e Conversor Cc-cc Boost Quadrático. Eletrônica De Potência, 2024, 20, 383-394.	0.1	0

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109	Controller Design Based on Internal Model Applied in a Quadratic Boost Converter with P&O MPPT. Renewable Energy and Power Quality Journal, 0, 1, 253-258.	0.2	0
110	Algoritmo de Seguimento do Ponto de Máxima Potência Global para Inversores Solares Multistring em Condições de Sombreamento Parcial. Eletrônica De Potência, 2024, 23, 182-192.	0.1	0
111	Projeto e Análise Experimental de uma Nova Estrutura de Retificador Híbrido Trifásico Utilizando Técnica de Compensação Síncrona de Tensão no Barramento CC. Eletrônica De Potência, 2024, 23, 267-280. ^{0.1}	0.1	0
112	Design and Development of a Grid-tied Transformerless Single-stage Multistring Photovoltaic CSI Inverter. Eletrônica De Potência, 2020, 25, 104-113.	0.1	0
113	A Programmable Source Based on Multi-level Buck EIE inverter connected to a power factor correction stage composed by a single-phase hybrid rectifier. Renewable Energy and Power Quality Journal, 0, , 309-314.	0.2	0
114	Project and Performance Evaluation on an Optimized 18-Pulse Rectifier With Delta-Differential Connection ATRU and Cascaded Boost Converters for More Electric Aircraft. IEEE Access, 2022, 10, 68397-68415.	4.2	0