Francisco Azcondo

List of Publications by Year
in descending order

92	1,125	489802 18	488211 31
papers	citations	h-index	g-index

94	94	94	872
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Two-Sample PLL With Harmonic Filtering Capability Applicable to Single-Phase Grid-Connected Converters. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2021, 9, 3072-3082.	3.7	8
2	Battery Charger Based on a Resonant Converter for High-Power LiFePO4 Batteries. Electronics (Switzerland), 2021, 10, 266.	1.8	2
3	Hardware-in-the-Loop and Digital Control Techniques Applied to Single-Phase PFC Converters. Electronics (Switzerland), 2021, 10, 1563.	1.8	14
4	Improved Noise Immunity for Two-Sample PLL Applicable to Single-Phase PFCs. , 2021, , .		1
5	Emulator of a Boost Converter for Educational Purposes. Electronics (Switzerland), 2020, 9, 1883.	1.8	8
6	Implementation Oriented Two-Sample Phase Locked Loop for Single-Phase PFCs. , 2020, , .		0
7	Evaluation of Quadrature Signal Generation Methods with Reduced Computational Resources for Grid Synchronization of Single-Phase Power Converters through Phase-Locked Loops. Electronics (Switzerland), 2020, 9, 2026.	1.8	5
8	Two-Phase Resonant Converter to Drive High-Power LED Lamps. Electronics (Switzerland), 2020, 9, 53.	1.8	1
9	Power Source Electronic Ballast for Electrodeless Fluorescent Lamps. Electronics (Switzerland), 2020, 9, 34.	1.8	1
10	ANTI-ISLANDING SOLUTIONS IN LOW AND MEDIUM VOLTAGE. Dyna (Spain), 2020, 95, 583-586.	0.1	0
11	Low THDi Controller for Current Sensorless Single Phase Rectifiers using a Two-Sample Phase Locked Loop. , 2019, , .		1
12	Current-Sensorless Power Factor Correction With Predictive Controllers. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2019, 7, 891-900.	3.7	20
13	Ferroresonance phenomena in mediumâ€voltage isolated neutral grids: a case study. IET Renewable Power Generation, 2019, 13, 209-214.	1.7	6
14	Electronic resistor emulators for ferroresonance damping in MV transformers. IET Renewable Power Generation, 2019, 13, 201-208.	1.7	4
15	Stability and Performance Assessment of Single-Phase <inline-formula> <tex-math notation="LaTeX">T </tex-math> </inline-formula>/4 PLLs With Secondary Control Path in Current Sensorless Bridgeless PFCs. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2018, 6, 674-685.	3.7	6
16	Power Quality Enhancement in Residential Smart Grids Through Power Factor Correction Stages. IEEE Transactions on Industrial Electronics, 2018, 65, 8553-8564.	5.2	55
17	Ferroresonance Mitigation Device in Voltage Transformers with a Flyback based Resistor Emulator. , 2018, , .		1
18	An Optimized Implementation of a Two-Sample Phase Locked Loop with Frequency Feedback for Single-Phase Sensorless Bridgeless PFC. , 2018, , .		3

#	Article	IF	Citations
19	An Efficient FPGA Implementation of a Quadrature Signal-Generation Subsystem in SRF PLLs in Single-Phase PFCs. IEEE Transactions on Power Electronics, 2017, 32, 3959-3969.	5.4	49
20	Unfolded resonant converter with current doubler structure module for welding applications. , 2017, , .		3
21	Alternating current welding using four quadrant switches. , 2015, , .		1
22	Converter With Four Quadrant Switches for EDM Applications. IEEE Transactions on Industry Applications, 2014, 50, 4356-4362.	3.3	12
23	Contribution to digital power factor correction controllers in high intensity discharge lamps electronic ballast applications. IET Power Electronics, 2014, 7, 1886-1894.	1.5	5
24	Single ADC Digital PFC Controller Using Precalculated Duty Cycles. IEEE Transactions on Power Electronics, 2014, 29, 996-1005.	5.4	25
25	Energy efficient outdoor lighting: An implementation. , 2014, , .		3
26	Universal Digital Controller for Boost CCM Power Factor Correction Stages Based on Current Rebuilding Concept. IEEE Transactions on Power Electronics, 2014, 29, 3818-3829.	5.4	49
27	Size Reduction in Low-Frequency Square-Wave Ballasts for High-Intensity Discharge Lamps Using Soft-Saturation Magnetic Material and Digital Control Techniques. IEEE Transactions on Power Electronics, 2013, 28, 1036-1046.	5.4	15
28	Digital Control for an Arc Welding Machine Based on Resonant Converters and Synchronous Rectification. IEEE Transactions on Industrial Informatics, 2013, 9, 839-847.	7.2	31
29	Feedforward compensation of resonant converters with heavy ripple in the DC bus for LED lamp driver applications. , 2013, , .		3
30	Solid-State Lighting: A System Review. IEEE Industrial Electronics Magazine, 2013, 7, 6-14.	2.3	119
31	Modulation Scheme for Dimming High-Brightness LED Lamps. Journal of Light and Visual Environment, 2013, 37, 92-94.	0.2	0
32	High-resolution error compensation in continuous conduction mode power factor correction stage without current sensor. , 2012, , .		3
33	L-R approximation of a phase-controlled LCpCs resonant converter to study the dynamic response as a LED lamp driver. , 2012, , .		0
34	Average Inductor Current Sensor for Digitally Controlled Switched-Mode Power Supplies. IEEE Transactions on Power Electronics, 2012, 27, 3795-3806.	5.4	42
35	PCB of a buck converter for laboratory practical classes in power electronics. , 2012, , .		3
36	Pulsed current source to drive high-brightness LED lamps. , 2012, , .		3

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37	Power-Mode Control of Multiphase Resonant Electronic Ballast. IEEE Transactions on Industrial Electronics, 2012, 59, 1770-1778.	5.2	18
38	Performance Improvements in an Arc-Welding Power Supply Based on Resonant Inverters. IEEE Transactions on Industry Applications, 2012, 48, 888-894.	3.3	10
39	Current Phase Surveillance in Resonant Converters for Electric Discharge Applications to Assure Operation in Zero-Voltage-Switching Mode. IEEE Transactions on Power Electronics, 2012, 27, 2925-2935.	5.4	17
40	Frequency control and phase surveillance in resonant electronic ballast. , 2011, , .		0
41	TIG Welding Machines. IEEE Industry Applications Magazine, 2011, 17, 53-58.	0.3	11
42	Anti-flicker digital PFC controller for HID lamp electronic ballast. , 2011, , .		0
43	Voltage Fluctuations in Lamps and Ballasts. IEEE Industry Applications Magazine, 2011, 17, 45-52.	0.3	2
44	Phase-controlled parallel-series (LC<inf>p</inf>C<inf>s</inf>) resonant converter to drive high-brightness power LEDs. , 2011, , .		5
45	Digitally Controlled Low-Frequency Square-Wave Electronic Ballast With Resonant Ignition and Power Loop. IEEE Transactions on Industry Applications, 2010, 46, 2222-2232.	3.3	14
46	Performance Improvements in an Arc Welding Power Supply Based on Resonant Inverters. , 2010, , .		3
47	Penta-Phase Series-Parallel $LC_{s}{C}_{p}$ Resonant Inverter to Drive 1-kW HPS Lamps. IEEE Transactions on Industry Applications, 2010, 46, 1730-1739.	3.3	4
48	Power Factor Correction Without Current Sensor Based on Digital Current Rebuilding. IEEE Transactions on Power Electronics, 2010, 25, 1527-1536.	5.4	67
49	Teaching Resonant Converters: Properties and Applications for Variable Loads. IEEE Transactions on Industrial Electronics, 2010, 57, 3355-3363.	5.2	39
50	Advanced Cutting Experiences for a Nuclear Power Plant Application. IEEE Transactions on Industry Applications, 2010, 46, 89-93.	3.3	1
51	Course on Digital Electronics Oriented to Describing Systems in VHDL. IEEE Transactions on Industrial Electronics, 2010, 57, 3308-3316.	5.2	9
52	New specification for the PFC controller in HID lamps electronic ballast. , 2010, , .		1
53	Pre-calculated duty cycle control implemented in FPGA for power factor correction. , 2009, , .		11
54	DC and Pulsed DC TIG Welding with a Scalable Power Supply. , 2009, , .		4

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55	Low Frequency Architecture for Multi-Lamp CCFL Systems With Capacitive Ignition. Journal of Display Technology, 2009, 5, 152-161.	1.3	8
56	Simplified analysis of a PWM-controlled parallel resonant inverter for electronic ballast applications. , 2009, , .		2
57	Envelope modeling and small-signal analysis of a PWM-controlled parallel resonant inverter for electronic ballast applications. , 2009, , .		0
58	Reduced Order Model for Envelope and Small-Signal Analysis of a Phase-Controlled Triple LCpCs Resonant Inverter for Electronic Ballast Applications. , 2009, , .		0
59	Current Sensorless Power Factor Correction based on Digital Current Rebuilding. , 2009, , .		2
60	Digital Phase Control of an Integrated Resonant Igniter Using a Soft Saturation Core for High Intensity Discharge Lamps. , 2009, , .		2
61	Digital Control of a Low-Frequency Square-Wave Electronic Ballast With Resonant Ignition. IEEE Transactions on Industrial Electronics, 2008, 55, 3180-3191.	5.2	36
62	A new bipolar power supply for spark erosion based on a series-parallel resonant inverter. IEEE Applied Power Electronics Conference and Exposition, 2008, , .	0.0	8
63	Envelope Analysis of a Phase-Controlled Triple LCpCs Resonant Inverter for Electronic Ballast Applications. , 2008, , .		0
64	A Generalized Study of Multiphase Parallel Resonant Inverters for High-Power Applications. IEEE Transactions on Circuits and Systems I: Regular Papers, 2008, 55, 2128-2138.	3.5	20
65	Envelope analysis applied to multi-phase resonant inverters. Power Electronics Specialist Conference (PESC), IEEE, 2008, , .	0.0	0
66	Penta-Phase Series-Parallel LCsCp Resonant Inverter to Drive 1kW HPS Lamps. Conference Record - IAS Annual Meeting (IEEE Industry Applications Society), 2007, , .	0.0	0
67	Microcontroller Power Mode Stabilized Power Factor Correction Stage for High Intensity Discharge Lamp Electronic Ballast. IEEE Transactions on Power Electronics, 2007, 22, 845-853.	5.4	41
68	Quadratic Approximation for High-frequency Behavioral Fluorescent Lamp Model. , 2007, , .		1
69	Advanced Cutting Experiences for a Nuclear Power Plant Application. Conference Record - IAS Annual Meeting (IEEE Industry Applications Society), 2007, , .	0.0	0
70	Design of Resonant Inverters for Optimal Efficiency Over Lamp Life in Electronic Ballast With Phase Control. IEEE Transactions on Power Electronics, 2007, 22, 815-823.	5.4	28
71	Output Current Sensitivity Analysis of the <formula formulatype="inline"><tex> $LC_{p}C_{s}$</tex></formula> Resonant Inverter: Current-Source Design Criteria. IEEE Industrial Electronics Magazine, 2007, 54, 1560-1568.	2.3	14
72	Phase-Controlled Quadruple ${LC}_{p}$ Resonant Inverter to Drive 600-W HPS Lamps. IEEE Transactions on Power Electronics, 2007, 22, 831-838.	5.4	4

#	Article	IF	Citations
73	Penta-Phase Series-Parallel LCsCp Resonant Inverter to Drive 1kW HPS Lamps. , 2007, , .		0
74	Effects of voltage sags on different types of ballasts for 150-W HPS lamps. , 2007, , .		6
75	Control of low-frequency square-wave electronic ballast with resonant ignition using a dsPIC30F2010. , 2007, , .		4
76	Comparison of flicker sensitivity in HPS lamps. , 2007, , .		3
77	High spark, low loss - paralleled LC/sub S/C/sub p/ resonant converters for spark erosion applications. IEEE Industry Applications Magazine, 2006, 12, 43-51.	0.3	11
78	26.1: Low-Frequency Square-Wave Drive for Large Screen LCD-TV Backlighting Systems. Digest of Technical Papers SID International Symposium, 2006, 37, 1238.	0.1	3
79	Microcontroller power mode stabilized power factor correction stage for electronic ballast applied to metal halide lamps. Industrial Electronics Society (IECON), Annual Conference of IEEE, 2006, , .	0.0	5
80	Analysis, Design and Experimental Results of a High-Frequency Power Supply for Spark Erosion. IEEE Transactions on Power Electronics, 2005, 20, 361-369.	5.4	45
81	Design of<tex>LC_pC_s</tex>Resonant Inverters as a Power Source for HID Lamp Ballast Applications. IEEE Transactions on Industry Applications, 2005, 41, 1584-1593.	3.3	38
82	Parallel connection of multiple resonant inverters to drive high-power high-intensity discharge lamps. , 2005, , .		4
83	Resonant converters: properties and applications for variable loads. , 2005, , .		3
84	Power-Mode-Controlled Power-Factor Corrector for Electronic Ballast. IEEE Transactions on Industrial Electronics, 2005, 52, 56-65.	5.2	35
85	Study of Output Power Variation Due to Component Tolerances in>tex<LC_sC_p>/tex<Resonant Inverters Applied to HPS Lamp Control. IEEE Transactions on Industrial Electronics, 2004, 51, 122-131.	5.2	14
86	Seriesâ€“parallel resonant converter for an EDM power supply. Journal of Materials Processing Technology, 2004, 149, 172-177.	3.1	17
87	Contributions to the design and control of LC/sub s/C/sub p/ resonant inverters to drive high-power HPS lamps. IEEE Transactions on Industrial Electronics, 2000, 47, 796-808.	5.2	28
88	Electronic ballast for 150 W HPS lamps with compensated output power. Electronics Letters, 1999, 35, 1041.	0.5	1
89	New digital compensation technique for the design of a microcomputer compensated crystal oscillator. IEEE Transactions on Industrial Electronics, 1995, 42, 307-315.	5.2	8
90	Electrical discharge machining experiences with a resonant power supply. , 0, , .		3

#	Article	IF	Citations
91	Phase controlled LC/sub p/C/sub s/ resonant inverter applied to HID lamp control. , 0, , .		0
92	Approaches to modeling converters with current programmed control. , 0, , .		13