Jose Alex Restrepo

List of Publications by Year
in descending order

95 papers	**1,338** citations	516710 **16** h-index	580821 **25** g-index
95 all docs	**95** docs citations	**95** times ranked	**1030** citing authors

#	Article	IF	Citations
1	IED Design for a Small-Scale Microgrid Using IEC 61850. IEEE Transactions on Industry Applications, 2019, 55, 7113-7121.	4.9	13
2	An experimental support tool for power electronics education. , 2019, , .		4
3	Load Identification for Smart Grid Management. , 2019, , .		3
4	Direct Position Control for Ultrahigh-Speed Switched-Reluctance Machines Based on Low-Cost Nonintrusive Reflective Sensors. IEEE Transactions on Industry Applications, 2019, 55, 480-489.	4.9	29
5	A Methodology for the Identification of Design Faults in a Prototype of a Medium Power Three-Phase Inverter. , 2018, , .		0
6	Inverter Control for Power Injection from PV Sources in Microgrids Under Unbalanced Power Grid and Load Conditions. , 2018, , .		1
7	Non Intrusive Load Monitoring in Chaotic Switched Networks. , 2018, , .		2
8	Grid Connected Inverter with Active Power Filter Capabilities for Two-phase Systems. , 2018, , .		3
9	Space Vector Control of Asymmetrical Single-Phase Induction Motors. , 2018, , .		5
10	Analysis of the Impact of Stator Interturn Short-Circuit Faults on Induction Machines Driven by Direct Torque Control. IEEE Transactions on Energy Conversion, 2018, 33, 1463-1474.	5.2	24
11	Back-to-Back Active Power Filter for Current Balancing in Two-Phase Systems. , 2017, , .		0
12	Implicit PV cell parameters estimation used in approximated closed-form model for inverter power control. , 2017, , .		1
13	Direct position control for ultra-high speed switched reluctance machines based on non-contact optical sensors. , 2017, , .		6
14	A high-frequency rotating flux injection based rotor thermal monitoring scheme for direct-torque-controlled interior permanent magnet synchronous machines. , 2017, , .		4
15	A high-frequency torque injection-based rotor thermal monitoring scheme for direct-torque-controlled interior permanent magnet synchronous machines. , 2017, , .		4
16	Active power filter with current balancing capability for two-phase systems. , 2017, , .		1
17	Experimental framework for laboratory scale microgrids. Revista Facultad De IngenierÃa, 2016, , 9-23.	0.5	10
18	Explicit model of PV cells considering variations in temperature and solar irradiance. , 2016, , .		2

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19	Current control for a grid-connected inverter operating with highly distorted grid voltage. , 2016, , .		2
20	Design of Current Control Loop for Grid Connected Inverters Operating Under Nonideal Grid Conditions. , 2016, , .		2
21	Hybrid control scheme for the current loop of a grid connected inverter operating with highly distorted grid voltage. , 2016, , .		1
22	Switched reluctance machine optimization method using current-fed FEA simulation. , 2015, , .		0
23	Parameter estimation method for induction machines using instantaneous voltage and current measurements. Revista Facultad De IngenierÃa, 2015, , .	0.5	4
24	Fractional order PF controller applied to the induction machine current loop. , 2015, , .		0
25	High speed SRM control considering the inductance profile of a flux-bridge rotor. , 2015, , .		2
26	Practical Considerations for the Design and Construction of a High-Speed SRM With a Flux-Bridge Rotor. IEEE Transactions on Industry Applications, 2015, 51, 4515-4520.	4.9	22
27	An improved DC-signal-injection method with active torque-ripple mitigation for thermal monitoring of field-oriented-controlled induction motors. , 2015, , .		14
28	Predictive control of a three-phase power converter coupled with LCL filter. , 2015, , .		4
29	Switched Reluctance Machine fuzzy modeling applied on a MRAC scheme. , 2015, , .		1
30	Two-phase active power filter direct current control with capacitor voltages estimation and balance. , 2015, , .		7
31	Comparison of the parameter estimation for the induction machine dynamic model using instantaneous measurements at standstill and during start-up. , 2015, , .		1
32	Predictive control strategy for DFIG wind turbines with maximum power point tracking using multilevel converters. , 2015, , .		9
33	Current controller for induction motor using an Artificial Neural Network trained with a Lyapunov based algorithm. , 2015, , .		0
34	A Flexible Hardware Platform for Applications in Power Electronics Research and Education. , 2014, , .		23
35	Fast detection of sequence components using Savitzky-Golay filters. , 2014, , .		2
36	Practical considerations for the design and construction of a high speed SRM with a flux-bridge rotor. , 2014, , .		8

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37	Shunt active power filter for harmonic compensation of two-phase nonlinear loads. , 2014, , .		4
38	Simplified FPGA implementation of the generalized space vector pulse width modulation (GSVPWM) for three wire three-phase inverters. , 2014, , .		1
39	DC voltage estimation methods for multilevel converter operating with reduced number of sensors. , 2014, , .		2
40	Predictive DTC algorithm for induction machines using Sliding Horizon Prediction. , 2014, , .		7
41	Nonintrusive, Self-Organizing, and Probabilistic Classification and Identification of Plugged-In Electric Loads. IEEE Transactions on Smart Grid, 2013, 4, 1371-1380.	9.0	50
42	Model of the induction machine including saturation. , 2013, , .		10
43	Electromagnetic design considerations for a 50,000 rpm 1kW Switched Reluctance Machine using a flux bridge. , 2013, , .		11
44	Analysis of a four-phase induction machine with direct torque control. , 2013, , .		5
45	Online Surge Testing Applied to an Induction Machine With Emulated Insulation Breakdown. IEEE Transactions on Industry Applications, 2013, 49, 1358-1366.	4.9	18
46	Harmonic and Unbalance Compensation Based on Direct Power Control for Electric Railway Systems. IEEE Transactions on Power Electronics, 2013, 28, 5823-5831.	7.9	61
47	Feedforward Transient Compensation Control for DFIG Wind Turbines During Both Balanced and Unbalanced Grid Disturbances. IEEE Transactions on Industry Applications, 2013, 49, 1452-1463.	4.9	98
48	A Nonintrusive Thermal Monitoring Method for Induction Motors Fed by Closed-Loop Inverter Drives. IEEE Transactions on Power Electronics, 2012, 27, 4122-4131.	7.9	50
49	Self-organizing classification and identification of miscellaneous electric loads. , 2012, , .		14
50	Parameter Estimation Method for Induction Machines Using the Instantaneous Impedance During a Dynamic Start-Up. , 2012, , .		17
51	Fuzzy Control System for Maximum Power Point Tracking in Solar Panels Based on DC-DC Converter PI Current Control. , 2012, , .		5
52	Comparing Parameter Identification Strategies for a Saturated Model of an Induction Motor. , 2012, , .		4
53	Switching Strategies for Fault Tolerant Operation of Single DC-link Dual Converters. IEEE Transactions on Power Electronics, 2012, 27, 509-518.	7.9	53
54	Online surge testing applied to an induction machine with emulated insulation breakdown. , 2011, , .		1

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55	Experimental emulation of stator turn insulation breakdown during a surge test. , 2011, , .		3
56	Sensitivity analysis of the surge test applied to AC machines. , 2011, , .		4
57	Calculation of fault current contribution of Type I wind turbine-generators. , 2011, , .		8
58	A nonintrusive thermal monitoring method for closed-loop drive-fed induction machines. , 2011, , .		8
59	Direct Power Control of a Dual Converter Operating as a Synchronous Rectifier. IEEE Transactions on Power Electronics, 2011, 26, 1410-1417.	7.9	20
60	A New Concept for Online Surge Testing for the Detection of Winding Insulation Deterioration in Low-Voltage Induction Machines. IEEE Transactions on Industry Applications, 2011, 47, 2051-2058.	4.9	25
61	Generalized Algorithm for Pulse Width Modulation Using a Two-Vectors Based Technique. EPE Journal (European Power Electronics and Drives Journal), 2011, 21, 30-39.	0.7	8
62	A new concept for online surge testing for the detection of winding insulation deterioration. , 2010, , .		13
63	Dual converter active filter and balance compensation on electric railway systems using the open delta transformer connection. , 2010, , .		1
64	Harmonic and balance compensation using instantaneous active and reactive power control on electric railway systems. , 2010, , .		8
65	Direct power control of a dual converter operating as synchronous rectifier. , 2010, , .		1
66	Optimum Space Vector Computation Technique for Direct Power Control. IEEE Transactions on Power Electronics, 2009, 24, 1637-1645.	7.9	67
67	Lyapunovâ€based training algorithm applied to a continually on lineâ€trained ANN used in the currentâ€loop control of a singleâ€phase switched rectifier. International Journal of Adaptive Control and Signal Processing, 2008, 22, 609-625.	4.1	2
68	PLATAFORMA: A useful tool for high level education, research and development. , 2008, , .		7
69	Nonstationary Motor Fault Detection Using Recent Quadratic Timeâ€"Frequency Representations. IEEE Transactions on Industry Applications, 2008, 44, 735-744.	4.9	117
70	A simplified rectifier voltage vector selection for Direct Power Control. , 2008, , .		1
71	Active Energy Recovering Snubber for the Asymmetric Inverter. , 2008, , .		0
72	Matrix converter induction motor drive with DTC-based fuzzy control. , 2007, , .		2

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73	Simplified Control Structure for Current Control of Single Phase Rectifiers Using COT-ANN-PWM. Neural Networks (IJCNN), International Joint Conference on, 2007, , .	0.0	13
74	Algorithm evaluation for the optimal selection of the space vector voltage using DPC in power systems. , 2007, , .		11
75	Direct torque control of PMSM using fuzzy logic with PWM. , 2007, , .		4
76	Induction Machine Current Loop Neuro Controller Employing a Lyapunov based Training Algorithm. IEEE Power Engineering Society General Meeting, 2007, , .	0.0	6
77	Analytic-Wavelet-Ridge-Based Detection of Dynamic Eccentricity in Brushless Direct Current (BLDC) Motors Functioning Under Dynamic Operating Conditions. IEEE Industrial Electronics Magazine, 2007, 54, 1410-1419.	2.6	125
78	Induction Motor Direct Torque Control Using Matrix Converters. , 2006, , .		2
79	Direct Torque Control of Induction Motors Using a Fuzzy Inference System for Reduced Ripple Torque and Current Limitation. , 2006, , .		9
80	Detection of Rotor Faults in Brushless DC Motors Operating Under Nonstationary Conditions. IEEE Transactions on Industry Applications, 2006, 42, 1464-1477.	4.9	112
81	A Simple Switch Selection State for SVM Direct Power Control. , 2006, , .		34
82	Direct Torque Control of the Switched Reluctance Motor using A Variable Structure Fuzzy Controller. , 2006, , .		0
83	Fuzzy-DTC applied to dynamic load emulation. , 2006, , .		2
84	Non-Stationary Motor Fault Detection Using Recent Quadratic Time-Frequency Representations. Conference Record - IAS Annual Meeting (IEEE Industry Applications Society), 2006, , .	0.0	17
85	Direct Torque Control of Induction Motors Using a Fuzzy Inference System for Reduced Ripple Torque and Current Limitation. , 2006, , .		1
86	Direct torque control of induction motors using fuzzy logic with current limitation. , 2005, , .		10
87	Selecting time-frequency representations for detecting rotor faults in BLDC motors operating under rapidly varying operating conditions. , 2005, , .		11
88	A novel analytic wavelet ridge detector for dynamic eccentricity detection in BLDC motors under dynamic operating conditions. , 2005, , .		1
89	Wigner-Ville distributions for detection of rotor faults in brushless DC (BLDC) motors operating under non-stationary conditions. , 2005, , .		18
90	Influence of the motor load inertia and torque in the fault diagnosis of rotors in induction machines. IEEE Latin America Transactions, 2005, 3, 48-53.	1.6	7

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91	Induction Machine Estimator for Vector Control Applications Using Neural Networks. IEEE Power Engineering Review, 1998, 18, 50-52.	0.1	6
92	Active filtering for single phase systems using a modified switching technique. , 0, , .		0
93	Platform III: A new version for the integrated test system for AC machine drives performance analysis. , 0, , .		18
94	COT-ANN-PWM single-phase synchronous rectifiers without line-voltage sensors. , 0, , .		1
95	Diagnosis of rotor faults in brushless DC (BLDC) motors operating under non-stationary conditions using windowed fourier ridges. , 0, , .		10