Roberto Morales-Caporal

List of Publications by Year
in descending order

40 papers	790 citations	687363 13 h-index	677142 22 g-index
41 all docs	41 docs citations	41 times ranked	861 citing authors

#	Article	IF	Citations
1	Optimal indirect model predictive control for single-phase two-level shunt active power filters. Journal of Power Electronics, 2022, 22, 84-93.	1.5	4
2	Blue Electroluminescence in SRO-HFCVD Films. Nanomaterials, 2021, 11, 943.	4.1	3
3	Design and Hardware Implementation of an IGBT-Based Half-Bridge Cell for Modular Voltage Source Inverters. Electronics (Switzerland), 2021, 10, 2549.	3.1	1
4	Design and Hardware Implementation of a H-Bridge Sub-module for Single-Phase 5-Level Cascaded Voltage Source Inverters. , 2021, , .		2
5	Modulated Model Predictive Control for Single-Phase 2-Level Shunt Active Power Filter. , 2021, , .		0
6	Simplified Reactive Power Control of a Multilevel Inverter for Grid-Connected Photovoltaic Applications. , 2021, , .		1
7	Design and Implementation of a Power Cell for Assembling Modular Voltage Source Inverters. , 2021, , .		2
8	Development and Implementation of a Relay Switch Based on WiFi Technology. , 2020, , .		4
9	A Remote Immobilization System with GSM and GPS Technologies for Cargo Trailers. , 2020, , .		1
10	Modified model predictive torque control for a PMSMâ€drive with torque ripple minimisation. IET Power Electronics, 2019, 12, 1033-1042.	2.1	26
11	Direct torque control of a PMSM-drive for electric vehicle applications. , 2018, , .		12
12	FPGA-in-the-loop simulation of a grid-connected photovoltaic system by using a predictive control. Electrical Engineering, 2018, 100, 1327-1337.	2.0	14
13	HIL simulation of the DTC for a three-level inverter fed a PMSM with neutral-point balancing control based on FPGA. Electrical Engineering, 2018, 100, 1441-1454.	2.0	8
14	A Comparison on Finite-Set Model Predictive Torque Control Schemes for PMSMs. IEEE Transactions on Power Electronics, 2018, 33, 8838-8847.	7.9	66
15	Real Time Monitoring of 3 Axis Accelerometer using an FPGA ZynqÂ®-7000 and Embedded Linux through Ethernet. , 2018, , .		1
16	Exploration and Exploitation of High Dimensional Biological Datasets Using a Wrapper Approach Based on Strawberry Plant Algorithm. Lecture Notes in Computer Science, 2018, , 307-317.	1.3	0
17	Vibration Analysis of Partially Damaged Rotor Bar in Induction Motor under Different Load Condition Using DWT. Shock and Vibration, 2016, 2016, 1-11.	0.6	30
18	Design of a New Controller for an Inverter Operation in Transitional Regime Within a Microgrid. IEEE Latin America Transactions, 2016, 14, 4724-4732.	1.6	4

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19	Facial Expression Analysis with Kinect for the Diagnosis of Paralysis Using Nottingham Grading System. IEEE Latin America Transactions, 2016, 14, 3418-3426.	1.6	11
20	A Smart Switch to Connect and Disconnect Electrical Devices at Home by Using Internet. IEEE Latin America Transactions, 2016, 14, 1575-1581.	1.6	8
21	Optimal Venturini Modulation for a Three-phase Four-Wire Matrix Converter. IEEE Latin America Transactions, 2016, 14, 617-623.	1.6	13
22	Hybrid Framework Using Multiple-Filters and an Embedded Approach for an Efficient Selection and Classification of Microarray Data. IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2016, 13, 12-26.	3.0	48
23	Digital Controller for an Electric Wheelchair Based on a Low-Cost Hardware. IEEE Latin America Transactions, 2015, 13, 3221-3227.	1.6	3
24	Parameter Identification of PMSMs Using Experimental Measurements and a PSO Algorithm. IEEE Transactions on Instrumentation and Measurement, 2015, 64, 2146-2154.	4.7	68
25	Empirical Mode Decomposition Analysis for Broken-Bar Detection on Squirrel Cage Induction Motors. IEEE Transactions on Instrumentation and Measurement, 2015, 64, 1118-1128.	4.7	93
26	FPGA-Based Broken Bars Detection on Induction Motors Under Different Load Using Motor Current Signature Analysis and Mathematical Morphology. IEEE Transactions on Instrumentation and Measurement, 2014, 63, 1032-1040.	4.7	70
27	Hybrid Multiple-Filter-Multiple-Wrapper Method Used for Gene Selection from Biomedical Database. IEEE Latin America Transactions, 2013, 11, 609-615.	1.6	0
28	Sensorless Predictive DTC of a Surface-Mounted Permanent-Magnet Synchronous Machine Based on Its Magnetic Anisotropy. IEEE Transactions on Industrial Electronics, 2013, 60, 3016-3024.	7.9	34
29	Transducerless Acquisition of the Rotor Position for Predictive Torque Controlled PM Synchronous Machines Based on a DSP-FPGA Digital System. IEEE Transactions on Industrial Informatics, 2013, 9, 799-807.	11.3	25
30	DSP-Based Space Vector Modulation for a VSI-Fed Permanent Magnet Drive. , 2012, , .		1
31	Analysis of the fourth leg command of a three-phase active filter inverter. , 2011, , .		0
32	Suppression of Saturation Effects in a Sensorless Predictive Controlled Synchronous Reluctance Machine Based on Voltage Space Phasor Injections. IEEE Transactions on Industrial Electronics, 2011, 58, 2809-2817.	7.9	30
33	Simulation of an inverter working as an active power filter and as an auxiliary power supply. , 2010, , .		0
34	DSP-Based Digital Torque/Motion Control of DC Motors for Direct-Drive Industrial Robotic Applications. , 2010, , .		3
35	Control System Design and Simulation of an AC/DC - DC/DC - DC/AC Power Converter for a Permanent Magnet Wind Power Generator in Rural Power Generation. , 2009, , .		7
36	Three-Phase Active Power Filter under Non-sinusoidal Voltage Conditions. , 2009, , .		0

#	Article	IF	Citations
37	Impact of the magnetic cross-saturation in a sensorless Direct Torque controlled Synchronous Reluctance Machine based on test voltage signal injections. , 2008, , .		9
38	Encoderless Predictive Direct Torque Control for Synchronous Reluctance Machines at Very Low and Zero Speed. IEEE Transactions on Industrial Electronics, 2008, 55, 4408-4416.	7.9	79
39	Digital implementation of a direct mean torque control for AC servo drives based on a hybrid DSP/FPGA controller system. , 2008, , .		5
40	A Predictive Torque Control for the Synchronous Reluctance Machine Taking Into Account the Magnetic Cross Saturation. IEEE Transactions on Industrial Electronics, 2007, 54, 1161-1167.	7.9	104