

Antonio Garcia Espinosa

List of Publications by Year in descending order

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361413

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53
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53
docs citations

53
times ranked

1898
citing authors

#	ARTICLE	IF	CITATIONS
1	Fault Detection in Induction Machines Using Power Spectral Density in Wavelet Decomposition. IEEE Transactions on Industrial Electronics, 2008, 55, 633-643.	7.9	431
2	Bearing Fault Detection by a Novel Condition-Monitoring Scheme Based on Statistical-Time Features and Neural Networks. IEEE Transactions on Industrial Electronics, 2013, 60, 3398-3407.	7.9	387
3	Modeling of Surface-Mounted Permanent Magnet Synchronous Motors With Stator Winding Interturn Faults. IEEE Transactions on Industrial Electronics, 2011, 58, 1576-1585.	7.9	214
4	Fault Detection by Means of Hilbert–Huang Transform of the Stator Current in a PMSM With Demagnetization. IEEE Transactions on Energy Conversion, 2010, 25, 312-318.	5.2	192
5	Rare-earth-free propulsion motors for electric vehicles: A technology review. Renewable and Sustainable Energy Reviews, 2016, 57, 367-379.	16.4	179
6	Detection of Demagnetization Faults in Permanent-Magnet Synchronous Motors Under Nonstationary Conditions. IEEE Transactions on Magnetics, 2009, 45, 2961-2969.	2.1	178
7	Feature Extraction of Demagnetization Faults in Permanent-Magnet Synchronous Motors Based on Box-Counting Fractal Dimension. IEEE Transactions on Industrial Electronics, 2011, 58, 1594-1605.	7.9	78
8	Design and Optimization for Vehicle Driving Cycle of Rare-Earth-Free SynRM Based on Coupled Lumped Thermal and Magnetic Networks. IEEE Transactions on Vehicular Technology, 2018, 67, 196-205.	6.3	42
9	Demagnetization diagnosis in permanent magnet synchronous motors under non-stationary speed conditions. Electric Power Systems Research, 2010, 80, 1277-1285.	3.6	40
10	Multiobjective Optimization of Multi-Carrier Energy System Using a Combination of ANFIS and Genetic Algorithms. IEEE Transactions on Smart Grid, 2018, 9, 2276-2283.	9.0	39
11	A Simple 2-D Finite-Element Geometry for Analyzing Surface-Mounted Synchronous Machines With Skewed Rotor Magnets. IEEE Transactions on Magnetics, 2010, 46, 3948-3954.	2.1	38
12	A Sensorless Method for Controlling the Closure of a Contactor. IEEE Transactions on Magnetics, 2007, 43, 3896-3903.	2.1	36
13	Load forecasting framework of electricity consumptions for an Intelligent Energy Management System in the user-side. Expert Systems With Applications, 2012, 39, 5557-5565.	7.6	35
14	Signal Injection as a Fault Detection Technique. Sensors, 2011, 11, 3356-3380.	3.8	30
15	Sensorless Control and Fault Diagnosis of Electromechanical Contactors. IEEE Transactions on Industrial Electronics, 2008, 55, 3742-3750.	7.9	29
16	A Novel Parametric Model for AC Contactors. IEEE Transactions on Magnetics, 2008, 44, 2215-2218.	2.1	27
17	Computationally Efficient Design and Optimization Approach of PMSynRM in Frequent Operating Torque–Speed Range. IEEE Transactions on Energy Conversion, 2018, 33, 1776-1786.	5.2	27
18	On-line fault detection method for induction machines based on signal convolution. European Transactions on Electrical Power, 2011, 21, 475-488.	1.0	26

#	ARTICLE	IF	CITATIONS
19	A Computer Model for Teaching the Dynamic Behavior of AC Contactors. IEEE Transactions on Education, 2010, 53, 248-256.	2.4	23
20	Simulation and Fault Detection of Short Circuit Winding in a Permanent Magnet Synchronous Machine (PMSM) by means of Fourier and Wavelet Transform. , 2008, , .		20
21	Closed-Loop Controller for Eliminating the Contact Bounce in DC Core Contactors. IEEE Transactions on Components and Packaging Technologies, 2010, 33, 535-543.	1.3	20
22	Dynamic model for AC and DC contactors " Simulation and experimental validation. Simulation Modelling Practice and Theory, 2011, 19, 1918-1932.	3.8	20
23	PMSM Parameter Estimation for Sensorless FOC Based on Differential Power Factor. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-12.	4.7	17
24	PMSM Design for Achieving a Target Torque-Speed-Efficiency Map. IEEE Transactions on Vehicular Technology, 2020, 69, 14448-14457.	6.3	12
25	Modeling of contact bounce of AC contactor. , 0, , .		11
26	Magnetic field generated by sagging conductors of overhead power lines. Computer Applications in Engineering Education, 2011, 19, 787-794.	3.4	11
27	Dedicated hierarchy of neural networks applied to bearings degradation assessment. , 2013, , .		11
28	Sensorless control of five phase PMSM based on extended Kalman filter. , 2016, , .		11
29	Development of a Behavior Maps Tool to Evaluate Drive Operational Boundaries and Optimization Assessment of PMA-SynRMs. IEEE Transactions on Vehicular Technology, 2018, 67, 6861-6871.	6.3	11
30	An educational tool to assist the design process of switched reluctance machines. International Journal of Electrical Engineering and Education, 2017, 54, 35-56.	0.8	9
31	Detection of Eccentricity Faults in Five-Phase Ferrite-PM Assisted Synchronous Reluctance Machines. Applied Sciences (Switzerland), 2017, 7, 565.	2.5	8
32	A computer experiment to simulate the dynamic behaviour of electric vehicles driven by switched reluctance motors. International Journal of Electrical Engineering and Education, 2014, 51, 368-382.	0.8	7
33	Design of Shading Coils for Minimizing the Contact Bouncing of AC Contactors. , 2008, , .		6
34	Electric field effects of bundle and stranded conductors in overhead power lines. Computer Applications in Engineering Education, 2011, 19, 107-114.	3.4	6
35	Detection of Inter-Turn Faults in Multi-Phase Ferrite-PM Assisted Synchronous Reluctance Machines. Energies, 2019, 12, 2733.	3.1	6
36	Detection of Partial Demagnetization Faults in Five-Phase Permanent Magnet Assisted Synchronous Reluctance Machines. Energies, 2020, 13, 3496.	3.1	6

#	ARTICLE	IF	CITATIONS
37	New SynRM design approach based on behaviour maps analysis. , 2016, , .		5
38	Rotor of synchronous reluctance motor optimization by means reluctance network and genetic algorithm. , 2016, , .		5
39	Double frequency test for detecting faults in induction machines. , 2005, , .		4
40	Dynamic characterization and position estimation of electromechanical contactors. , 2008, , .		4
41	An introduction to fault diagnosis of permanent magnet synchronous machines in master's degree courses. Computer Applications in Engineering Education, 2013, 21, 349-359.	3.4	4
42	Constrained-size torque maximization in SynRM machines by means of genetic algorithms. , 2015, , .		4
43	A Parallel Analytical Computation of Synchronous Reluctance Machine. , 2018, , .		4
44	Contact Bounce Elimination by Means of a Sensorless Closed-Loop Current Controller in DC Core Contactors. , 2008, , .		3
45	Design of an estimator of the kinematics of AC contactors. European Transactions on Electrical Power, 2009, 19, 933-948.	1.0	3
46	Validation of the parametric model of a DC contactor using Matlabâ€™Simulink. Computer Applications in Engineering Education, 2011, 19, 337-346.	3.4	3
47	PMSM Torque-Speed-Efficiency Map Evaluation from Parameter Estimation Based on the Stand Still Test. Energies, 2021, 14, 6804.	3.1	3
48	Multi-carrier optimal power flow of energy hubs by means of ANFIS and SQP. , 2016, , .		2
49	Water-Pumping Permanent Magnet Synchronous Motor Optimization Based on Customized Torque-Speed Operating Area and Performance Characteristics. , 2019, , .		2
50	Fault Detection Analysis in Induction Motors by Injecting Additional Test Signal. , 2006, , .		1
51	Dynamic nonlinear reluctance network analysis of five phase outer rotor BLDC machine. , 2016, , .		1
52	Operational boundaries calculation of permanent magnet assisted synchronous reluctance motor. , 2017, , .		0
53	Computationally Efficient Analysis of Spatial and Temporal Harmonics Content of the Magnetic Flux Distribution in a PMSM for Efficiency Maps Computation. , 2020, , .		0