Antonino Oscar Di Tommaso

List of Publications by Citations

86 papers	951 citations	16 h-index	25 g-index
101 ext. papers	1,346 ext. citations	3.8 avg, IF	4.23 L-index

#	Paper	IF	Citations
86	Efficiency enhancement of permanent-magnet synchronous motor drives by online loss minimization approaches. *IEEE Transactions on Industrial Electronics*, **2005**, 52, 1153-1160	8.9	153
85	Comprehensive Modeling and Experimental Testing of Fault Detection and Management of a Nonredundant Fault-Tolerant VSI. *IEEE Transactions on Industrial Electronics*, **2015**, 1-1	8.9	46
84	A DSP-Based Resolver-To-Digital Converter for High-Performance Electrical Drive Applications. *IEEE Transactions on Industrial Electronics*, **2016**, 63, 4042-4051	8.9	43
83	A New Software Tool for Design, Optimization, and Complete Analysis of Rotating Electrical Machines Windings. *IEEE Transactions on Magnetics*, **2015**, 51, 1-10	2	30
82	Experimental investigation on high efficiency real-time control algorithms for IPMSMs **2014**,		26
81	Investigation of motor current signature and vibration analysis for diagnosing rotor broken bars in double cage induction motors **2012**,		26
80	Efficiency Maximization of Permanent Magnet Synchronous Generators Coupled Coupled to Wind Turbines **2007**,		25
79	Characterization of the parameters of interior permanent magnet synchronous motors for a loss model algorithm. *Measurement: Journal of the International Measurement Confederation*, **2017**, 106, 196-202	2.6	23
78	A General Mathematical Formulation for Winding Layout Arrangement of Electrical Machines. *Energies*, **2018**, 11, 446	3.1	20
77	Computer aided optimization via simulation tools of energy generation systems with universal small wind turbines **2012**,		20
76	A Rotor Flux and Speed Observer for Sensorless Single-Phase Induction Motor Applications. *International Journal of Rotating Machinery*, **2012**, 2012, 1-13	1.3	18
75	Active power maximizing for Wind Electrical Energy Generating Systems moved by a Modular Multiple Blade Fixed Pitch Wind Turbine **2008**,		18
74	Analytical Investigation and Control System Set-up of Medium Scale PV Plants for Power Flow Management. *Energies*, **2012**, 5, 4399-4416	3.1	17
73	Experimental analysis with FPGA controller-based of MC PWM techniques for three-phase five level cascaded H-bridge for PV applications **2016**,		17
72	An IPMSM torque/weight and torque/moment of inertia ratio optimization **2014**,		16
71	Investigation of inductive coupling solutions for E-bike wireless charging **2015**,		16
70	Wireless battery charging: E-bike application **2013**,		16

69	A new high accuracy software based resolver-to-digital converter		16
68	E-bike battery charging: Methods and circuits **2013**,		15
67	A software for the evaluation of winding factor harmonic distribution in high efficiency electrical motors and generators **2013**,		15
66	Design and experimental characterization of a low-cost, real-time, wireless AC monitoring system based on ATmega 328P-PU microcontroller **2015**,		15
65	Experimental Validation of a Novel Method for Harmonic Mitigation for a Three-Phase Five-Level Cascaded H-Bridges Inverter. *IEEE Transactions on Industry Applications*, **2019**, 55, 6089-6101	4.3	14
64	Vibration signature analysis for rotor broken bar diagnosis in double cage induction motor drives **2013**,		14
63	Sensorless variable speed single-phase induction motor drive system based on direct rotor flux orientation **2012**,		14
62	Development of diagnostic systems for the fault tolerant operation of Micro-Grids. **2010**,		13
61	An Exact Method for the Determination of Differential Leakage Factors in Electrical Machines With Non-Symmetrical Windings. *IEEE Transactions on Magnetics*, **2016**, 52, 1-9	2	13
60	Experimental test on a Contactless Power Transfer system **2014**,		12
59	Inductive Power Transfer for 100W battery charging **2013**,		12
58	A small power transmission prototype for electric vehicle wireless battery charge applications **2012** ,		12
57	Efficiency optimization in bi-directional inductive power transfer systems **2015**,		11
56	Vibration signature analysis for monitoring rotor broken bar in double squirrel cage induction motors based on wavelet analysis. *COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering*, **2014**, 33, 1625-1641	0.7	11
55	Analysis a DSP implementation and experimental validation of a loss minimization algorithm applied to permanent magnet synchronous motor drives		11
54	The use of slightly asymmetrical windings for rotating electrical machines. *International Transactions on Electrical Energy Systems*, **2018**, 28, e2569	2.2	10
53	A geometrical simple approach for power silicon devices fault detection and fault-tolerant operation of a voltage source inverter **2012**,		10
52	Analysis, characterization and minimization of IPMSMs cogging torque with different rotor structures **2015**,		9

51	An inductive charger for automotive applications **2016**,		9
50	A General Mathematical Formulation for the Determination of Differential Leakage Factors in Electrical Machines With Symmetrical and Asymmetrical Full or Dead-Coil Multiphase Windings. *IEEE Transactions on Industry Applications*, **2018**, 54, 5930-5940	4.3	8
49	Closed-loop bandwidth impact on MVSA for rotor broken bar diagnosis in IRFOC double squirrel cage induction motor drives **2013**,		8
48	Experimental study on efficiency enhancement in Interior Permanent Magnet Synchronous machines **2015**,		8
47	Sensorless variable speed single-phase induction motor drive system **2012**,		8
46	A flux and speed observer for sensorless SPIM applications **2010**,		8
45	Efficiency Control for Permanent Magnet Synchronous Generators **2006**,		8
44	Interior permanent magnet synchronous motors: Impact of the variability of the parameters on their efficiency **2016**,		8
43	Batteries for Aerospace: a Brief Review **2018**,		8
42	Optimum Performance of Permanent Magnet Synchronous Generators Coupled to Wind Turbines. *IEEE Power Engineering Society General Meeting*, **2007**,		6
41	Diagnosis of mechanical unbalance for double cage induction motor load in time-varying conditions based on motor vibration signature analysis **2013**,		5
40	Fast procedure for the calculation of maximum slot filling factors in electrical machines **2017**,		5
39	Speed control of a two-degrees of freedom induction motor with rotor Helical Motion for industrial applications **2014**,		5
38	Fault Tolerant Ancillary Function of Power Converters in Distributed Generation Power System within a Microgrid Structure. *Advances in Power Electronics*, **2013**, 2013, 1-12		5
37	Monitoring and diagnosis of failures in squirrel-cage induction motors due to cracked or broken bars **2011**,		5
36	Improvement of IPMSM performance through a mixed radial-tangential rotor structure **2010**,		5
35	Test Bench Realization and Application of Specific Working Cycles for the Characterization of Wheelchair Electrical Drives **2006**,		5
34	Maximum Torque Per Ampere control algorithm for low saliency ratio interior permanent magnet synchronous motors **2017**,		4

33	Control subsystem design for wireless power transfer **2014**,		4
32	Assisted software design of a wide variety of windings in rotating electrical machinery **2014**,		4
31	Experimental validation of a general model for three phase inverters operating in healthy and faulty modes **2012**,		4
30	A General and Accurate Measurement Procedure for the Detection of Power Losses Variations in Permanent Magnet Synchronous Motor Drives. *Energies*, **2020**, 13, 5770	3.1	4
29	Economic evaluation of PV system for EV charging stations: Comparison between matching maximum orientation and storage system employment **2016**,		4
28	Energy management of multi-carrier smart buildings for integrating local renewable energy systems **2016**,		4
27	Enhanced Flexible Algorithm for the Optimization of Slot Filling Factors in Electrical Machines. *Energies*, **2020**, 13, 1041	3.1	3
26	A cogging torque minimization procedure for IPMSMs based on different laminate geometry **2016**,		3
25	Finite-element performance comparison of IPMSMs with unsymmetrical double-layer windings **2017**,		3
24	Switching Frequency Effects on the Efficiency and Harmonic Distortion in a Three-Phase Five-Level CHBMI Prototype with Multicarrier PWM Schemes: Experimental Analysis. *Energies*, **2022**, 15, 586	3.1	3
23	Simple and Flexible Power Loss Minimizer With Low-Cost MCU Implementation for High-Efficiency Three-Phase Induction Motor Drives. *IEEE Transactions on Industry Applications*, **2021**, 57, 1472-1481	4.3	3
22	Algorithmic Approach for Slot Filling Factors Determination in Electrical Machines **2018**,		3
21	Experimental Comparison of Efficiency Enhancement Algorithms for Three-Phase Induction Motors **2019**,		2
20	A novel improved matlab-based software for the electric and magnetic analysis and design of rotating electrical machines **2015**,		2
19	Cogging torque comparison of Interior Permanent Magnet Synchronous Generators with different stator windings **2017**,		2
18	A review of multiple faults diagnosis methods in Voltage Source Inverters **2015**,		2
17	A reexamination of voltage distortion for classical carrier-based vs B-Spline modulation of three-phase Voltage Sources Inverters **2015**,		2
16	Sensorless control of permanent magnet synchronous motors for wide speed range applications		2

15	Modelling, Simulation and Characterization of a Supercapacitor in Automotive Applications. *IEEE Transactions on Industry Applications*, **2022**, 1-1	4.3	2
14	FOC with Resolver Implementation for PMSM Drives by Using a Low Cost Atmel SAM3X8E Microcontroller **2020**,		2
13	Experimental characterization of a wind generator prototype for sustainable small wind farms **2016** ,		2
12	Design issues for wind farms grid tied Inverter **2017**,		1
11	Differential Leakage Factor in Electrical Machines Equipped with Asymmetrical Multiphase Windings: a General Investigation **2019**,		1
10	A General Investigation on the Differential Leakage Factor for Symmetrical and Asymmetrical Multiphase Winding Design. *Energies*, **2020**, 13, 5414	3.1	1
9	Current fault signatures of Voltage Source Inverters in different reference frames **2016**,		1
8	Quantitative rotor broken bar evaluation in double squirrel cage induction machines under dynamic operating conditions **2013**,		1
7	Determination of differential leakage factors in electrical machines with non-symmetrical full and dead-coil windings **2017**,		1
6	A modular approach in teaching thyristor rectifiers with equation-oriented softwares **2014**,		1
5	Wind Electrical energy generating systems EMC. A dedicated experimental simulator for tests **2008** ,		1
4	Impact Evaluation of Innovative Selective Harmonic Mitigation Algorithm for Cascaded H-Bridge Inverter on IPMSM Drive Application. *IEEE Open Journal of Industry Applications*, **2021**, 1-1	4.7	1
3	Experimental Characterization Of a Double Receiver Dynamic Wireless Charging System **2020**,		1
2	Modelling, Simulation and Characterization of a Supercapacitor in Automotive Applications **2020**,		1
1	Uncertainty evaluation in the differential measurements of power losses in a power drive system. *Measurement: Journal of the International Measurement Confederation*, **2021**, 183, 109795	4.6	0