Antonino Oscar Di Tommaso

List of Publications by Year
in descending order

100	1,576	623574	642610
papers	citations	14 h-index	23 g-index

101	101	101	825
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Efficiency Enhancement of Permanent-Magnet Synchronous Motor Drives by Online Loss Minimization Approaches. IEEE Transactions on Industrial Electronics, 2005, 52, 1153-1160.	5.2	223
2	A DSP-Based Resolver-To-Digital Converter for High-Performance Electrical Drive Applications. IEEE Transactions on Industrial Electronics, 2016, 63, 4042-4051.	5.2	70
3	Comprehensive Modelling and and Experimental Testing of Fault Detection and Management of a Non-Redundant Fault-Tolerant VSI. IEEE Transactions on Industrial Electronics, 2015, , 1-1.	5.2	67
4	A New Software Tool for Design, Optimization, and Complete Analysis of Rotating Electrical Machines Windings. IEEE Transactions on Magnetics, 2015, 51, 1-10.	1.2	41
5	Efficiency Maximization of Permanent Magnet Synchronous Generators Coupled Coupled to Wind Turbines. , 2007, , .		40
6	Experimental investigation on high efficiency real-time control algorithms for IPMSMs. , 2014, , .		40
7	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.	2.5	37
8	A General Mathematical Formulation for Winding Layout Arrangement of Electrical Machines. Energies, 2018, 11, 446.	1.6	37
9	Computer aided optimization via simulation tools of energy generation systems with universal small wind turbines. , 2012, , .		35
10	E-bike battery charging: Methods and circuits. , 2013, , .		34
11	Active power maximizing for Wind Electrical Energy Generating Systems moved by a Modular Multiple Blade Fixed Pitch Wind Turbine. , 2008, , .		33
12	Experimental analysis with FPGA controller-based of MC PWM techniques for three-phase five level cascaded H-bridge for PV applications. , 2016, , .		33
13	Analytical Investigation and Control System Set-up of Medium Scale PV Plants for Power Flow Management. Energies, 2012, 5, 4399-4416.	1.6	30
14	Investigation of motor current signature and vibration analysis for diagnosing rotor broken bars in double cage induction motors. , 2012, , .		30
15	Investigation of inductive coupling solutions for E-bike wireless charging. , 2015, , .		28
16	Wireless battery charging: E-bike application. , 2013, , .		27
17	A new high accuracy software based resolver-to-digital converter. , 0, , .		25
18	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.	3.3	25

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19	A Rotor Flux and Speed Observer for Sensorless Single-Phase Induction Motor Applications. International Journal of Rotating Machinery, 2012, 2012, 1-13.	0.8	24
20	Batteries for Aerospace: a Brief Review. , 2018, , .		22
21	A small power transmission prototype for electric vehicle wireless battery charge applications. , 2012, , .		21
22	An IPMSM torque/weight and torque/moment of inertia ratio optimization. , 2014, , .		21
23	Vibration signature analysis for rotor broken bar diagnosis in double cage induction motor drives. , 2013, , .		20
24	A software for the evaluation of winding factor harmonic distribution in high efficiency electrical motors and generators. , 2013, , .		20
25	Experimental test on a Contactless Power Transfer system. , 2014, , .		20
26	Design and experimental characterization of a low-cost, real-time, wireless AC monitoring system based on ATmega 328P-PU microcontroller. , 2015, , .		20
27	Sensorless variable speed single-phase induction motor drive system based on direct rotor flux orientation. , 2012, , .		19
28	An inductive charger for automotive applications. , 2016, , .		19
29	Efficiency optimization in bi-directional inductive power transfer systems. , 2015, , .		18
30	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.	1.2	18
31	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.	3.3	18
32	Inductive Power Transfer for 100W battery charging. , 2013, , .		17
33	Economic evaluation of PV system for EV charging stations: Comparison between matching maximum orientation and storage system employment. , 2016, , .		17
34	Development of diagnostic systems for the fault tolerant operation of Micro-Grids.. , 2010, , .		16
35	Analysis a DSP implementation and experimental validation of a loss minimization algorithm applied to permanent magnet synchronous motor drives. , 0, , .		15
36	Sensorless variable speed single-phase induction motor drive system. , 2012, , .		15

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37	Fast procedure for the calculation of maximum slot filling factors in electrical machines. , 2017, , .		15
38	The use of slightly asymmetrical windings for rotating electrical machines. International Transactions on Electrical Energy Systems, 2018, 28, e2569.	1.2	15
39	A General and Accurate Measurement Procedure for the Detection of Power Losses Variations in Permanent Magnet Synchronous Motor Drives. Energies, 2020, 13, 5770.	1.6	15
40	Monitoring and diagnosis of failures in squirrel-cage induction motors due to cracked or broken bars. , 2011, , .		14
41	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.	0.5	14
42	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.	1.6	14
43	Efficiency Control for Permanent Magnet Synchronous Generators. , 2006, , .		13
44	A geometrical simple approach for power silicon devices fault detection and fault-tolerant operation of a voltage source inverter. , 2012, , .		12
45	Analysis, characterization and minimization of IPMSMs cogging torque with different rotor structures. , 2015, , .		12
46	Interior permanent magnet synchronous motors: Impact of the variability of the parameters on their efficiency. , 2016, , .		11
47	Modelling, Simulation and Characterization of a Supercapacitor in Automotive Applications. , 2020, , .		11
48	Optimum Performance of Permanent Magnet Synchronous Generators Coupled to Wind Turbines. IEEE Power Engineering Society General Meeting, 2007, , .	0.0	10
49	Experimental validation of a general model for three phase inverters operating in healthy and faulty modes. , 2012, , .		10
50	Closed-loop bandwidth impact on MVSA for rotor broken bar diagnosis in IRFOC double squirrel cage induction motor drives. , 2013, , .		10
51	Energy management of multi-carrier smart buildings for integrating local renewable energy systems. , 2016, , .		10
52	Maximum Torque Per Ampere control algorithm for low saliency ratio interior permanent magnet synchronous motors. , 2017, , .		10
53	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.	3.3	10
54	Modeling, Simulation, and Characterization of a Supercapacitor in Automotive Applications. IEEE Transactions on Industry Applications, 2022, 58, 2421-2429.	3.3	10

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55	Experimental study on efficiency enhancement in Interior Permanent Magnet Synchronous machines. , 2015, , .		9
56	Enhanced Flexible Algorithm for the Optimization of Slot Filling Factors in Electrical Machines. Energies, 2020, 13, 1041.	1.6	9
57	A flux and speed observer for sensorless SPIM applications. , 2010, , .		8
58	Fault Tolerant Ancillary Function of Power Converters in Distributed Generation Power System within a Microgrid Structure. Advances in Power Electronics, 2013, 2013, 1-12.	0.8	8
59	Experimental characterization of a wind generator prototype for sustainable small wind farms. , 2016, , .		8
60	A cogging torque minimization procedure for IPMSMs based on different laminate geometry. , 2016, , .		8
61	Test Bench Realization and Application of Specific Working Cycles for the Characterization of Wheelchair Electrical Drives. , 2006, , .		7
62	Diagnosis of mechanical unbalance for double cage induction motor load in time-varying conditions based on motor vibration signature analysis. , 2013, , .		7
63	Speed control of a two-degrees of freedom induction motor with rotor Helical Motion for industrial applications. , 2014, , .		7
64	Control subsystem design for wireless power transfer. , 2014, , .		7
65	Assisted software design of a wide variety of windings in rotating electrical machinery. , 2014, , .		7
66	Impact Evaluation of Innovative Selective Harmonic Mitigation Algorithm for Cascaded H-Bridge Inverter on IPMSM Drive Application. IEEE Open Journal of Industry Applications, 2021, 2, 347-365.	4.8	7
67	Improvement of IPMSM performance through a mixed radial-tangential rotor structure. , 2010, , .		6
68	A review of multiple faults diagnosis methods in Voltage Source Inverters. , 2015, , .		6
69	Sensorless control of permanent magnet synchronous motors for wide speed range applications. , 0, , .		5
70	Uncertainty evaluation in the differential measurements of power losses in a power drive system. Measurement: Journal of the International Measurement Confederation, 2021, 183, 109795.	2.5	5
71	Wind Electrical energy generating systems EMC. A dedicated experimental simulator for tests. , 2008, , .		4
72	Finite-element performance comparison of IPMSMs with unsymmetrical double-layer windings. , 2017, , .		4

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73	Algorithmic Approach for Slot Filling Factors Determination in Electrical Machines. , 2018, , .		4
74	Numerical analysis of medium scale PV plants and their power-flow control system with a simple three phase inverter. , 2012, , .		3
75	Cogging torque comparison of Interior Permanent Magnet Synchronous Generators with different stator windings. , 2017, , .		3
76	FOC with Resolver Implementation for PMSM Drives by Using a Low Cost Atmel SAM3X8E Microcontroller. , 2020, , .		3
77	Quantitative rotor broken bar evaluation in double squirrel cage induction machines under dynamic operating conditions. , 2013, , .		2
78	A modular approach in teaching thyristor rectifiers with equation-oriented softwares. , 2014, , .		2
79	A platform-independent software for the design and analysis of windings of rotating electrical machines. , 2014, , .		2
80	A reexamination of voltage distortion for classical carrier-based vs B-Spline modulation of three-phase Voltage Sources Inverters. , 2015, , .		2
81	A novel improved matlab-based software for the electric and magnetic analysis and design of rotating electrical machines. , 2015, , .		2
82	Wireless Power Transmission for house appliances: A small-scale resonant coupling prototype. , 2016, , .		2
83	Current fault signatures of Voltage Source Inverters in different reference frames. , 2016, , .		2
84	Experimental Comparison of Efficiency Enhancement Algorithms for Three-Phase Induction Motors. , 2019, , .		2
85	Preliminary test on a cascode switch for high-frequency applications. , 2020, , .		2
86	A General Investigation on the Differential Leakage Factor for Symmetrical and Asymmetrical Multiphase Winding Design. Energies, 2020, 13, 5414.	1.6	2
87	Test cycles for the characterization of electrical drives devoted to wheelchair applications. , 0, , .		1
88	Reducing DC link voltage unbalance in a fault-tolerant inverter. , 2014, , .		1
89	Design of a grid connected inverter for sustainable small wind farms. , 2016, , .		1
90	Design issues for wind farms grid tied Inverter. , 2017, , .		1

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91	Determination of differential leakage factors in electrical machines with non-symmetrical full and dead-coil windings. , 2017, , .		1
92	Differential Leakage Factor in Electrical Machines Equipped with Asymmetrical Multiphase Windings: a General Investigation. , 2019, , .		1
93	Performance Comparison of modified modulation Techniques for Quasi-Z-Source Converters. , 2020, , .		1
94	Comparison between 3-ph and 6-ph PMSM drives for the electric propulsion of unmanned aerial vehicles. , 2021, , .		1
95	Interior Permanent Magnet Synchronous Machine Drive Powered by Fuel Cell for Automotive Applications. , 2020, , .		1
96	Experimental Characterization Of a Double Receiver Dynamic Wireless Charging System. , 2020, , .		1
97	Sensorless low range speed estimation and parameter identification of induction motor drives devoted to lifts automatic rescue devices. , 2010, , .		0
98	Local DoS applications with micro wind generation systems. , 2015, , .		0
99	DC link voltage swinging and load current unbalance in fault tolerant VSI. overview and compensation strategies. , 2015, , .		0
100	Self training and meta-cognition goals. New approaches, trends and tools in modern teaching of power electronics. , 2016, , .		0