Michele Degano

List of Publications by Year in Descending Order

100 papers	826 citations	15 h-index	22 g-index
119 ext. papers	1,238 ext. citations	5.4 avg, IF	4.94 L-index

#	Paper	IF	Citations
100	Rotor Slot Design of Squirrel Cage Induction Motors with Improved Rated Efficiency and Starting Capability. *IEEE Transactions on Industry Applications*, **2022**, 1-1	4.3	
99	Synchronous Reluctance Machines: A Comprehensive Review and Technology Comparison. *Proceedings of the IEEE*, **2022**, 1-18	14.3	3
98	A Comparison of Prediction Models with Machine Learning Algorithms for Traction Characteristics in Linear Traction Induction Motors. *IEEJ Transactions on Electrical and Electronic Engineering*, **2022**, 17, 470-478	1	
97	Decoupled Discrete Current Control for AC Drives at Low Sampling-to-Fundamental Frequency Ratios. *IEEE Journal of Emerging and Selected Topics in Power Electronics*, **2022**, 1-1	5.6	
96	On the Use of Topology Optimization for Synchronous Reluctance Machines Design. *Energies*, **2022**, 15, 3719	3.1	1
95	Influence of Constructive Parameters on the Performance of an Axial-Flux Induction Machine with Solid and Magnetically Anisotropic Rotor **2021**,		1
94	Open-Circuit Air-Gap Magnetic Field Calculation of Interior Permanent Magnet Synchronous Motor With V-Shaped Segmented Skewed Poles Using Hybrid Analytical Method. *IEEE Transactions on Magnetics*, **2021**, 1-1	2	2
93	Calculation Model of Armature Reaction Magnetic Field of Interior Permanent Magnet Synchronous Motor with Segmented Skewed Poles. *IEEE Transactions on Energy Conversion*, **2021**, 1-1	5.4	1
92	Open and Closed Rotor Slots Design of Single and Double Cages Induction Motor **2021**,		2
91	Hairpin Windings: Sensitivity Analysis and Guidelines to Reduce AC Losses **2021**,		2
90	Improved Model Predictive Current Control for SPMSM Drives Using Current Update Mechanism. *IEEE Transactions on Industrial Electronics*, **2021**, 68, 1938-1948	8.9	10
89	Four-Degree-of-Freedom Overmodulation Strategy for Five-Phase Space Vector Pulsewidth Modulation. *IEEE Journal of Emerging and Selected Topics in Power Electronics*, **2021**, 9, 1578-1590	5.6	9
88	A Digital Internal Model Current Controller for Salient Machines. *IEEE Transactions on Industrial Electronics*, **2021**, 68, 4703-4717	8.9	7
87	A Novel Sizing Approach for Synchronous Reluctance Machines. *IEEE Transactions on Industrial Electronics*, **2021**, 68, 2083-2095	8.9	12
86	. *IEEE Transactions on Industrial Electronics*, **2021**, 68, 9070-9080	8.9	2
85	A Complete Equivalent Circuit for Linear Induction Motors With Laterally Asymmetric Secondary for Urban Railway Transit. *IEEE Transactions on Energy Conversion*, **2021**, 36, 1014-1022	5.4	2
84	. *IEEE Transactions on Energy Conversion*, **2021**, 36, 547-559	5.4	2

83	. *IEEE/ASME Transactions on Mechatronics*, **2021**, 26, 1129-1139	5.5	6
82	Impact of Star Connection Layouts on the Control of Multiphase Induction Motor Drives Under Open-Phase Fault. *IEEE Transactions on Power Electronics*, **2021**, 36, 3717-3726	7.2	13
81	Rotor Design Optimization of Squirrel Cage Induction Motor - Part I: Problem Statement. *IEEE Transactions on Energy Conversion*, **2021**, 36, 1271-1279	5.4	11
80	Rotor Design Optimization of Squirrel Cage Induction Motor - Part II: Results Discussion. *IEEE Transactions on Energy Conversion*, **2021**, 36, 1280-1288	5.4	7
79	. *IEEE Transactions on Industrial Electronics*, **2021**, 68, 160-174	8.9	18
78	Improved Thermal Modelling and Experimental Validation of Oil-Flooded High Performance Machines with Slot-Channel Cooling. *IEEE Transactions on Transportation Electrification*, **2021**, 1-1	7.6	1
77	Squirrel Cage Induction Motor: A Design-Based Comparison Between Aluminium and Copper Cages. *IEEE Open Journal of Industry Applications*, **2021**, 2, 110-120	4.7	2
76	On Torque Improvement by Current Harmonic Injection in Isotropic and Anisotropic Multi-Phase Machines. *IEEE Journal of Emerging and Selected Topics in Industrial Electronics*, **2021**, 1-1	2.6	1
75	High Speed Synchronous Reluctance Machines: Modeling, Design and Limits. *IEEE Transactions on Energy Conversion*, **2021**, 1-1	5.4	4
74	Optimised Design of Permanent Magnet Assisted Synchronous Reluctance Machines for Household Appliances. *IEEE Transactions on Energy Conversion*, **2021**, 1-1	5.4	6
73	Open and Short Circuit Post-Fault Control Strategies for Multi-Three-Phase Interior Permanent Magnet Machines. *IEEE Transactions on Energy Conversion*, **2021**, 1-1	5.4	1
72	Segmented Hairpin Topology for Reduced Losses at High Frequency Operations. *IEEE Transactions on Transportation Electrification*, **2021**, 1-1	7.6	3
71	A Novel Flux Barrier Parametrization for Synchronous Reluctance Machines. *IEEE Transactions on Energy Conversion*, **2021**, 1-1	5.4	4
70	High Speed Synchronous Reluctance Machines: Materials Selection and Performance Boundaries. *IEEE Transactions on Transportation Electrification*, **2021**, 1-1	7.6	2
69	Analysis and Design of Dual-Rotor Synchronous Reluctance Machine. *IEEE Journal of Emerging and Selected Topics in Power Electronics*, **2021**, 9, 4376-4383	5.6	2
68	Homothetic Design in Synchronous Reluctance Machines and Effects on Torque Ripple. *IEEE Transactions on Energy Conversion*, **2021**, 36, 2195-2205	5.4	3
67	Experimental Statistical Method Predicting AC Losses on Random Windings and PWM Effect Evaluation. *IEEE Transactions on Energy Conversion*, **2021**, 36, 2287-2296	5.4	3
66	Analysis and Performance of Five-Phase Piecewise-Random-Switching-Frequency Space Vector Pulse Width Modulation. *IEEE Transactions on Energy Conversion*, **2021**, 36, 2339-2347	5.4	1

65	4-MW Class High-Power-Density Generator for Future Hybrid-Electric Aircraft. *IEEE Transactions on Transportation Electrification*, **2021**, 7, 2952-2964	7.6	10
64	Modular Power Sharing Control for Bearingless Multi-Three Phase Permanent Magnet Synchronous Machine. *IEEE Transactions on Industrial Electronics*, **2021**, 1-1	8.9	1
63	A Modified Multi-Winding DC□DC Flyback Converter for Photovoltaic Applications. *Applied Sciences (Switzerland)*, **2021**, 11, 11999	2.6	1
62	Induction-Machine-Based Starter/Generator Systems: Techniques, Developments, and Advances. *IEEE Industrial Electronics Magazine*, **2020**, 14, 4-19	6.2	11
61	High-Speed Electric Drives: A Step Towards System Design. *IEEE Open Journal of the Industrial Electronics Society*, **2020**, 1, 10-21	3.6	8
60	Rectangular and Random Conductors: AC Losses Evaluations and Manufacturing Considerations **2020**,		8
59	Characteristic analysis and direct measurement for air gap magnetic field of external rotor permanent magnet synchronous motors in electric vehicles. *IET Electric Power Applications*, **2020**, 14, 1784-1794	1.8	0
58	Eccentric position diagnosis of static eccentricity fault of external rotor permanent magnet synchronous motor as an in-wheel motor. *IET Electric Power Applications*, **2020**, 14, 2263-2272	1.8	4
57	Control-Winding Direct Power Control Strategy for Five-Phase Dual-Stator Winding Induction Generator DC Generating System. *IEEE Transactions on Transportation Electrification*, **2020**, 6, 73-82	7.6	5
56	Advantages of a Double Three-Phase Winding Layout for a Dual Rotor E-Bike Motor Considering Third Current Harmonic Injection Technique **2020**,		1
55	A Multiport Power Conversion System for the More Electric Aircraft. *IEEE Transactions on Transportation Electrification*, **2020**, 6, 1707-1720	7.6	17
54	. *IEEE Transactions on Industrial Electronics*, **2020**, 1-1	8.9	4
53	Influence of Rotor Design on Electromagnetic Performance in Interior Permanent Magnet Machines **2020**,		1
52	Multi-Sector Windings For Bearing Relief E-Machine: Saturation and Cross Coupling Effects **2020**,		1
51	. *IEEE Transactions on Industrial Electronics*, **2020**, 67, 2553-2563	8.9	18
50	. *IEEE Transactions on Industrial Electronics*, **2020**, 67, 2630-2641	8.9	30
49	Improved Finite-State Model Predictive Current Control With Zero-Sequence Current Suppression for OEW-SPMSM Drives. *IEEE Transactions on Power Electronics*, **2020**, 35, 4996-5006	7.2	20
48	. *IEEE Transactions on Industrial Electronics*, **2020**, 67, 2607-2617	8.9	11

47	Optimized Sizing of IPM Machines for Automotive Traction Application **2019**,		3
46	Study of Regenerative Braking Effects in a Small Electric Race Car using Energetic Macroscopic Representation **2019**,		1
45	. *IEEE Transactions on Industry Applications*, **2019**, 55, 3544-3554	4.3	32
44	A Complete Equivalent Circuit Model for Linear Induction Motor Considering Thrust, Vertical and Transversal Forces **2019**,		2
43	Post -Fault Compensation Control Strategy for Multi-Three-Phase PMSM under Open-Circuit and Short-Circuit Condition **2019**,		1
42	Fault-Tolerant Electrical Machines for Transport Applications **2019**,		1
41	Sound-quality diagnosis method of permanent magnet synchronous motor for electric vehicles based on critical band analysis. *IET Electric Power Applications*, **2019**, 13, 1613-1621	1.8	0
40	A Resolver-to-Digital Conversion Method Based on Third-Order Rational Fraction Polynomial Approximation for PMSM Control. *IEEE Transactions on Industrial Electronics*, **2019**, 66, 6383-6392	8.9	15
39	. *IEEE Transactions on Industrial Electronics*, **2019**, 66, 5600-5610	8.9	14
38	Considerations on the Effects That Core Material Machining Has on an Electrical Machine's Performance. *IEEE Transactions on Energy Conversion*, **2018**, 33, 1154-1163	5.4	30
37	Design and Losses Analysis of a High Power Density Machine for Flooded Pump Applications. *IEEE Transactions on Industry Applications*, **2018**, 54, 3260-3270	4.3	36
36	Synchronous Reluctance Motor Iron Losses: Considering Machine Nonlinearity at MTPA, FW, and MTPV Operating Conditions. *IEEE Transactions on Energy Conversion*, **2018**, 33, 1402-1410	5.4	17
35	. *IEEE Transactions on Industry Applications*, **2018**, 54, 5760-5771	4.3	1
34	Multi-Port Power Conversion Systems for the More Electric Aircraft **2018**,		4
33	Investigation of AC Copper and Iron Losses in High-Speed High-Power Density PMSM **2018**,		12
32	**2018**,		4
31	**2018**,		1
30	The Influence of Stator Material on the Power Density and Iron Loss of a High-Performace Starter-Generator for More Electric Aircraft **2018**,		8

29	Design of PMSM for EMA Employed in Secondary Flight Control Systems **2018**,		7
28	Synchronous Reluctance Motor Iron Losses: Analytical Model and Optimization **2018**,		3
27	Response to Discussion of A Modular Speed-Drooped System for High Reliability Integrated Modular Motor Drives *IEEE Transactions on Industry Applications*, **2018**, 54, 4994-4995	4.3	1
26	Influence of rotor endcaps on the electromagnetic performance of high-speed PM machine. *IET Electric Power Applications*, **2018**, 12, 1142-1149	1.8	14
25	Comparative study of permanent magnet-synchronous and permanent magnet-flux switching machines for high torque to inertia applications **2017**,		18
24	**2017**,		3
23	Improved Damper Cage Design for Salient-Pole Synchronous Generators. *IEEE Transactions on Industrial Electronics*, **2017**, 64, 1958-1970	8.9	28
22	The impact of impulsive voltage waveforms on the electrical insulation of actuators for more electrical aircraft (MEA) **2017**,		7
21	**2016**,		6
20	Global design optimization strategy of a synchronous reluctance machine for light electric vehicles **2016**,		11
19	**2016**,		7
18	Design and optimization of a high power density machine for flooded industrial pump **2016**,		11
17	Thermal management of a permanent magnet motor for an directly coupled pump **2016**,		13
16	Comparison of flux observers for sensorless control of permanent magnet assisted SynRel motors **2016**,		1
15	Trade-off analysis and design of a high power density PM machine for flooded industrial pump **2016**,		10
14	Selection Criteria and Robust Optimization of a Traction PM-Assisted Synchronous Reluctance Motor. *IEEE Transactions on Industry Applications*, **2015**, 51, 4383-4391	4.3	29
13	Sensitivity Analysis of Torque Ripple Reduction of Synchronous Reluctance and Interior PM Motors. *IEEE Transactions on Industry Applications*, **2015**, 51, 187-195	4.3	81
12	End barrier shape optimizations and sensitivity analysis of synchrnous reluctance machines **2015**,		8

List of Publications

11	Robust optimization of a traction PMASR motor according to given driving cycles **2014**,	10
10	Analytical modeling of split-phase synchronous reluctance machines **2014**,	5
9	PM synchronous machine comparison for light electric vehicles **2014**,	7
8	On the analytical estimation of the airgap field in synchronous reluctance machine **2014**,	6
7	High frequency modelling method of EMI filters for hybrid Si - SiC matrix converters in aerospace applications **2013**,	3
6	Permanent magnet volume minimization in permanent magnet assisted synchronous reluctance motors **2013**,	12
5	Formula SAE electric competition: Electrical motor design **2013**,	7
4	Sensitivity analysis of torque ripple reduction of synchronous reluctance and interior PM motors **2013**,	15
3	On the use of dimensioning equations for surface permanent magnet machines **2012**,	1
2	Analytical calculation of air-gap armature reaction field including slotting effects in fractional-slot concentrated-coil SPM multiphase machines **2011**,	8
1	Improved dead beat control of a shunt active filter for aircraft power systems **2010**,	13