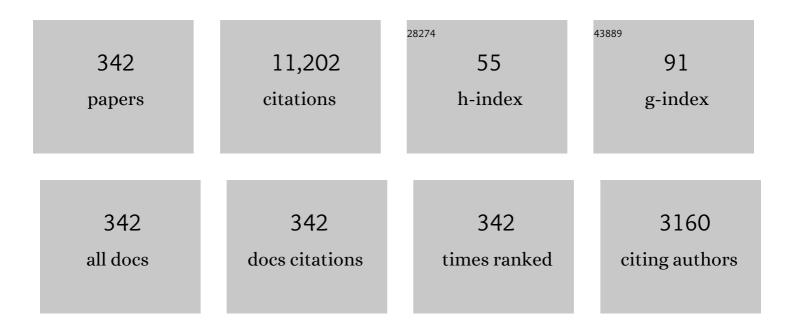
Nicola Bianchi

List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Design techniques for reducing the cogging torque in surface-mounted PM motors. IEEE Transactions on Industry Applications, 2002, 38, 1259-1265.	4.9	648
2	Rotor Flux-Barrier Design for Torque Ripple Reduction in Synchronous Reluctance and PM-Assisted Synchronous Reluctance Motors. IEEE Transactions on Industry Applications, 2009, 45, 921-928.	4.9	393
3	Design considerations for fractional-slot winding configurations of synchronous machines. IEEE Transactions on Industry Applications, 2006, 42, 997-1006.	4.9	367
4	Potentials and Limits of High-Speed PM Motors. IEEE Transactions on Industry Applications, 2004, 40, 1570-1578.	4.9	264
5	Strategies for the Fault-Tolerant Current Control of a Five-Phase Permanent-Magnet Motor. IEEE Transactions on Industry Applications, 2007, 43, 960-970.	4.9	245
6	Use of the star of slots in designing fractional-slot single-layer synchronous motors. IET Electric Power Applications, 2006, 153, 459.	1.4	209
7	Electric Vehicle Traction Based on Synchronous Reluctance Motors. IEEE Transactions on Industry Applications, 2016, 52, 4762-4769.	4.9	196
8	Tubular linear permanent magnet motors: an overall comparison. IEEE Transactions on Industry Applications, 2003, 39, 466-475.	4.9	186
9	Comparison of PM Motor Structures and Sensorless Control Techniques for Zero-Speed Rotor Position Detection. IEEE Transactions on Power Electronics, 2007, 22, 2466-2475.	7.9	177
10	Permanent-Magnet Optimization in Permanent-Magnet-Assisted Synchronous Reluctance Motor for a Wide Constant-Power Speed Range. IEEE Transactions on Industrial Electronics, 2012, 59, 2495-2502.	7.9	168
11	Influence of Rotor Geometry of an IPM Motor on Sensorless Control Feasibility. IEEE Transactions on Industry Applications, 2007, 43, 87-96.	4.9	166
12	Magnetic models of saturated interior permanent magnet motors based on finite element analysis. , 0, ,		153
13	Impact of MMF Space Harmonic on Rotor Losses in Fractional-Slot Permanent-Magnet Machines. IEEE Transactions on Energy Conversion, 2009, 24, 323-328.	5.2	152
14	Theory and Design of Fractional-Slot Multilayer Windings. IEEE Transactions on Industry Applications, 2013, 49, 841-849.	4.9	152
15	Faulty Operations of a PM Fractional-Slot Machine With a Dual Three-Phase Winding. IEEE Transactions on Industrial Electronics, 2011, 58, 3825-3832.	7.9	135
16	Analysis and Tests of a Dual Three-Phase 12-Slot 10-Pole Permanent-Magnet Motor. IEEE Transactions on Industry Applications, 2010, 46, 2355-2362.	4.9	133
17	Torque Harmonic Compensation in a Synchronous Reluctance Motor. IEEE Transactions on Energy Conversion, 2008, 23, 466-473.	5.2	131
18	Innovative remedial strategies for inverter faults in IPM synchronous motor drives. IEEE Transactions on Energy Conversion, 2003, 18, 306-314.	5.2	124

#	Article	IF	CITATIONS
19	The Rediscovery of Synchronous Reluctance and Ferrite Permanent Magnet Motors. Springer Briefs in Electrical and Computer Engineering, 2016, , .	0.5	116
20	Experimental Tests of Dual Three-Phase Induction Motor Under Faulty Operating Condition. IEEE Transactions on Industrial Electronics, 2012, 59, 2041-2048.	7.9	115
21	Performance Comparison Between Switching-Flux and IPM Machines With Rare-Earth and Ferrite PMs. IEEE Transactions on Industry Applications, 2014, 50, 3708-3716.	4.9	113
22	Sensitivity Analysis of Torque Ripple Reduction of Synchronous Reluctance and Interior PM Motors. IEEE Transactions on Industry Applications, 2015, 51, 187-195.	4.9	113
23	Interior PM Machines Using Ferrite to Replace Rare-Earth Surface PM Machines. IEEE Transactions on Industry Applications, 2014, 50, 979-985.	4.9	111
24	A Coupled Thermal–Electromagnetic Analysis for a Rapid and Accurate Prediction of IM Performance. IEEE Transactions on Industrial Electronics, 2008, 55, 3575-3582.	7.9	108
25	Design of a Fault-Tolerant IPM Motor for Electric Power Steering. IEEE Transactions on Vehicular Technology, 2006, 55, 1102-1111.	6.3	106
26	Impact of Stator Winding of a Five-Phase Permanent-Magnet Motor on Postfault Operations. IEEE Transactions on Industrial Electronics, 2008, 55, 1978-1987.	7.9	106
27	Traction PMASR Motor Optimization According to a Given Driving Cycle. IEEE Transactions on Industry Applications, 2016, 52, 209-216.	4.9	104
28	Synchronous Reluctance Machine Optimization for High-Speed Applications. IEEE Transactions on Energy Conversion, 2018, 33, 1266-1273.	5.2	104
29	An Overview of Rotor Losses Determination in Three-Phase Fractional-Slot PM Machines. IEEE Transactions on Industry Applications, 2010, 46, 2338-2345.	4.9	99
30	Design and Performance Comparison of Fractional Slot Concentrated Winding Spoke Type Synchronous Motors With Different Slot-Pole Combinations. IEEE Transactions on Industry Applications, 2018, 54, 2276-2284.	4.9	99
31	Design Criteria for High-Efficiency SPM Synchronous Motors. IEEE Transactions on Energy Conversion, 2006, 21, 396-404.	5.2	97
32	Six-Phase Supply Feasibility Using a PM Fractional-Slot Dual Winding Machine. IEEE Transactions on Industry Applications, 2011, 47, 2042-2050.	4.9	95
33	Parameters and volt-ampere ratings of a synchronous motor drive for flux-weakening applications. IEEE Transactions on Power Electronics, 1997, 12, 895-903.	7.9	93
34	High speed drive using a slotless PM motor. IEEE Transactions on Power Electronics, 2006, 21, 1083-1090.	7.9	93
35	Salient-rotor PM synchronous motors for an extended flux-weakening operation range. IEEE Transactions on Industry Applications, 2000, 36, 1118-1125.	4.9	92

Analysis and tests of a dual three-phase 12-slot 10-pole permanent magnet motor. , 2009, , .

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#	Article	IF	CITATIONS
37	Design of Synchronous Reluctance Motor for Hybrid Electric Vehicles. IEEE Transactions on Industry Applications, 2015, 51, 3030-3040.	4.9	90
38	High-performance PM synchronous motor drive for an electrical scooter. IEEE Transactions on Industry Applications, 2001, 37, 1348-1355.	4.9	89
39	Analysis and Design of a PM Brushless Motor for High-Speed Operations. IEEE Transactions on Energy Conversion, 2005, 20, 629-637.	5.2	85
40	Design considerations on fractional-slot fault-tolerant synchronous motors. , 2005, , .		77
41	Design Guideline of an AC Hairpin Winding. , 2018, , .		75
42	Line-Start PM-Assisted Synchronous Motor Design, Optimization, and Tests. IEEE Transactions on Industrial Electronics, 2017, 64, 9739-9747.	7.9	73
43	Considerations on Selecting Fractional-Slot Nonoverlapped Coil Windings. IEEE Transactions on Industry Applications, 2013, 49, 1316-1324.	4.9	71
44	Design and Analysis of a Novel High-Torque Stator-Segmented SRM. IEEE Transactions on Industrial Electronics, 2016, 63, 1458-1466.	7.9	71
45	Advantages of Inset PM Machines for Zero-Speed Sensorless Position Detection. IEEE Transactions on Industry Applications, 2008, 44, 1190-1198.	4.9	70
46	Geometry Analysis and Optimization of PM-Assisted Reluctance Motors. IEEE Transactions on Industry Applications, 2017, 53, 4338-4347.	4.9	70
47	Effect of Stator and Rotor Saturation on Sensorless Rotor Position Detection. IEEE Transactions on Industry Applications, 2013, 49, 1333-1342.	4.9	69
48	Experimental Comparison of PM-Assisted Synchronous Reluctance Motors. IEEE Transactions on Industry Applications, 2016, 52, 163-171.	4.9	68
49	Optimization of Interior PM Motors With Machaon Rotor Flux Barriers. IEEE Transactions on Magnetics, 2011, 47, 958-961.	2.1	67
50	Analytical field computation of a tubular permanent-magnet linear motor. IEEE Transactions on Magnetics, 2000, 36, 3798-3801.	2.1	66
51	Rotor Flux-Barrier Geometry Design to Reduce Stator Iron Losses in Synchronous IPM Motors Under FW Operations. IEEE Transactions on Industry Applications, 2010, 46, 1950-1958.	4.9	65
52	Design of a Low-Torque-Ripple Fractional-Slot Interior Permanent-Magnet Motor. IEEE Transactions on Industry Applications, 2014, 50, 1801-1808.	4.9	64
53	Structural Analysis of the Interior PM Rotor Considering Both Static and Fatigue Loading. IEEE Transactions on Industry Applications, 2014, 50, 253-260.	4.9	59
54	MMF Harmonics Effect on the Embedded FE Analytical Computation of PM Motors. IEEE Transactions on Industry Applications, 2010, 46, 812-820.	4.9	57

#	Article	IF	CITATIONS
55	Selection of PM Flux Linkage for Maximum Low-Speed Torque Rating in a PM-Assisted Synchronous Reluctance Machine. IEEE Transactions on Industry Applications, 2015, 51, 3600-3608.	4.9	57
56	On the Proprieties of the Differential Cross-Saturation Inductance in Synchronous Machines. IEEE Transactions on Industry Applications, 2017, 53, 991-1000.	4.9	57
57	A Very Rapid Prediction of IM Performance Combining Analytical and Finite-Element Analysis. IEEE Transactions on Industry Applications, 2008, 44, 1505-1512.	4.9	56
58	Interior PM machines using Ferrite to substitute rare-earth surface PM machines. , 2012, , .		56
59	Eccentricity in Synchronous Reluctance Motors—Part I: Analytical and Finite-Element Models. IEEE Transactions on Energy Conversion, 2015, 30, 745-753.	5.2	56
60	Fast synthesis of permanent magnet assisted synchronous reluctance motors. IET Electric Power Applications, 2016, 10, 312-318.	1.8	56
61	Rotor flux-barrier design for torque ripple reduction in synchronous reluctance motors. , 2006, , .		54
62	A Review on Magnetic Gears: Topologies, Computational Models, and Design Aspects. IEEE Transactions on Industry Applications, 2019, 55, 4557-4566.	4.9	54
63	Sensorless-Oriented Design of PM Motors. IEEE Transactions on Industry Applications, 2009, 45, 1249-1257.	4.9	53
64	Fast Estimation of Line-Start Reluctance Machine Parameters by Finite Element Analysis. IEEE Transactions on Energy Conversion, 2011, 26, 1-8.	5.2	53
65	Analysis of Rotor Saturation in Synchronous Reluctance and PM-Assisted Reluctance Motors. IEEE Transactions on Industry Applications, 2015, 51, 169-177.	4.9	53
66	An Analytical Approach to Design the PM in PMAREL Motors Robust Toward the Demagnetization. IEEE Transactions on Energy Conversion, 2016, 31, 800-809.	5.2	53
67	Design and Control of an Axial-Flux Machine for a Wide Flux-Weakening Operation Region. IEEE Transactions on Industry Applications, 2009, 45, 1258-1266.	4.9	51
68	Analytical Approach to Design Hairpin Windings in High Performance Electric Vehicle Motors. , 2018, , .		51
69	Magnetic Loading of Fractional-Slot Three-Phase PM Motors With Nonoverlapped Coils. IEEE Transactions on Industry Applications, 2008, 44, 1513-1521.	4.9	49
70	Variable-Speed Induction Machine Performance Computed Using Finite-Element. IEEE Transactions on Industry Applications, 2011, 47, 789-797.	4.9	49
71	Sensorless Rotor Position Detection Capability of a Dual Three-Phase Fractional-Slot IPM Machine. IEEE Transactions on Industry Applications, 2012, 48, 2068-2078.	4.9	49
72	Selection Criteria and Robust Optimization of a Traction PM-Assisted Synchronous Reluctance Motor. IEEE Transactions on Industry Applications, 2015, 51, 4383-4391.	4.9	49

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73	Rotor Losses Measurements in an Axial Flux Permanent Magnet Machine. IEEE Transactions on Energy Conversion, 2011, 26, 639-645.	5.2	48
74	Influence of rotor geometry of an interior PM motor on sensorless control feasibility. , 0, , .		47
75	Advantages of inset PM machines for zero-speed sensorless position detection. , 2006, , .		45
76	IPM Machine Drive Design and Tests for an Integrated Starter–Alternator Application. IEEE Transactions on Industry Applications, 2010, 46, 993-1001.	4.9	43
77	Core Axial Lengthening as Effective Solution to Improve the Induction Motor Efficiency Classes. IEEE Transactions on Industry Applications, 2014, 50, 218-225.	4.9	41
78	Thermal Analysis of a Five-Phase Motor Under Faulty Operations. IEEE Transactions on Industry Applications, 2013, 49, 1531-1538.	4.9	39
79	Design Criteria of Flux-Barriers in Synchronous Reluctance Machines. IEEE Transactions on Industry Applications, 2019, 55, 2490-2498.	4.9	38
80	Synchronous Reluctance Machines: A Comprehensive Review and Technology Comparison. Proceedings of the IEEE, 2022, 110, 382-399.	21.3	38
81	Impact of the Rotor Yoke Geometry on Rotor Losses in Permanent-Magnet Machines. IEEE Transactions on Industry Applications, 2012, 48, 98-105.	4.9	36
82	Torque ripple reduction in fractional-slot Interior PM machines optimizing the flux-barrier geometries. , 2012, , .		36
83	Design and comparison of interior permanent magnet synchronous motors with nonâ€uniform airgap and conventional rotor for electric vehicle applications. IET Electric Power Applications, 2014, 8, 240-249.	1.8	36
84	Interior PM synchronous motor for high performance applications. , 0, , .		35
85	Considerations on selecting fractional—slot windings. , 2010, , .		34
86	Remarks on Torque Estimation Accuracy in Fractional-Slot Permanent-Magnet Motors. IEEE Transactions on Industrial Electronics, 2012, 59, 2565-2572.	7.9	34
87	Performance comparison between switching-flux and IPM machine with rare earth and ferrite PMs. , 2012, , .		34
88	Design and Tests of a Fault-Tolerant Five-phase Permanent Magnet Motor. , 0, , .		33
89	Predicted and measured errors in estimating rotor position by signal injection for salient-pole PM synchronous motors. , 2009, , .		33
90	Eccentricity in Synchronous Reluctance Motors—Part II: Different Rotor Geometry and Stator Windings. IEEE Transactions on Energy Conversion, 2015, 30, 754-760.	5.2	33

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91	Design criteria of a tubular linear IPM motor. , 0, , .		32
92	Design of a Fault-tolerant IPM Motor for Electric Power Steering. , 0, , .		31
93	Synchronous Reluctance Motor Iron Losses: Considering Machine Nonlinearity at MTPA, FW, and MTPV Operating Conditions. IEEE Transactions on Energy Conversion, 2018, 33, 1402-1410.	5.2	30
94	Air-Gap Flux Density Distortion and Iron Losses in Anisotropic Synchronous Motors. IEEE Transactions on Magnetics, 2010, 46, 121-126.	2.1	29
95	Design of a low torque ripple fractional-slot interior permanent magnet motor. , 2012, , .		29
96	An Inverse Approach for Interturn Fault Detection in Asynchronous Machines Using Magnetic Pendulous Oscillation Technique. IEEE Transactions on Industry Applications, 2016, 52, 226-233.	4.9	29
97	A Method for Evaluating the Worst-Case Cogging Torque Under Manufacturing Uncertainties. IEEE Transactions on Energy Conversion, 2020, 35, 1837-1848.	5.2	29
98	Design Hints of an IPM Synchronous Motor for an Effective Position Sensorless Control. , 0, , .		28
99	Post-fault operations of five-phase motor using a full-bridge inverter. Power Electronics Specialist Conference (PESC), IEEE, 2008, , .	0.0	28
100	Finite-Element Analysis of Electrical Machines for Sensorless Drives With High-Frequency Signal Injection. IEEE Transactions on Industry Applications, 2014, 50, 1871-1879.	4.9	28
101	Design of synchronous reluctance motor for hybrid electric vehicles. , 2013, , .		27
102	Fault– Tolerant PM Motors in Automotive Applications. , 0, , .		26
103	Ringed-Pole Permanent-Magnet Synchronous Motor for Position Sensorless Drives. IEEE Transactions on Industry Applications, 2011, 47, 1759-1766.	4.9	26
104	Iron Saturation Impact on High-Frequency Sensorless Control of Synchronous Permanent-Magnet Motor. IEEE Transactions on Industry Applications, 2017, 53, 5470-5478.	4.9	26
105	Synchronous reluctance and interior permanent magnet motors. , 2013, , .		25
106	High-Frequency \$d\$– \$q\$ Model of Synchronous Machines for Sensorless Control. IEEE Transactions on Industry Applications, 2015, 51, 3923-3931.	4.9	25
107	A Nonlinear Analytical Model for the Rapid Prediction of the Torque of Synchronous Reluctance Machines. IEEE Transactions on Energy Conversion, 2018, 33, 1539-1546.	5.2	25
108	Comparison of PM motor structures and sensorless control techniques for zero-speed rotor		24

position detection., 0,,.

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109	Impact of Rotor Losses in a 12-Slot 10-Pole Axial Flux PM Machine. , 2008, , .		23
110	Design considerations to maximize performance of an IPM motor for a wide flux-weakening region. , 2010, , .		23
111	Investigation of Self-Excited Synchronous Reluctance Generators. IEEE Transactions on Industry Applications, 2018, 54, 1360-1369.	4.9	23
112	Performance analysis of an IPM motor with segmented rotor for flux-weakening applications. , 1999, , .		22
113	Design techniques for reducing the cogging torque in surface-mounted PM motors. , 0, , .		22
114	Axially laminated reluctance motor: analytical and finite-element methods for magnetic analysis. IEEE Transactions on Magnetics, 2002, 38, 239-245.	2.1	22
115	Impact of winding arrangement in dual 3-phase induction motor for fault tolerant applications. , 2010, , .		22
116	Rotor saturation impact in synchronous reluctance and PM assisted reluctance motors. , 2013, , .		21
117	Optimization of Flux Barriers of Line-start Synchronous Reluctance Motors for Transient- and Steady-state Operation. Electric Power Components and Systems, 2015, 43, 594-606.	1.8	21
118	Analytical Modeling of Slotless Eccentric Surface-Mounted PM Machines Using a Conformal Transformation. IEEE Transactions on Energy Conversion, 2017, 32, 658-666.	5.2	21
119	Nonlinear Analytical Computation of the Magnetic Field in Reluctance Synchronous Machines. IEEE Transactions on Industry Applications, 2017, 53, 5373-5382.	4.9	21
120	Rotor losses in fractional-slot three-phase and five-phase PM machines. , 2010, , .		20
121	Nonlinear Analytical Model of Eccentric Synchronous Reluctance Machines Considering the Iron Saturation and Slotting Effect. IEEE Transactions on Industry Applications, 2017, 53, 2007-2015.	4.9	20
122	Unified approach to the analysis and design of an AC motor drive for flux-weakening operations. , 0, , .		19
123	Core axial lengthening as effective solution to improve the induction motor efficiency classes. , 2011, , \cdot		19
124	Sensorless Capability of Fractional-Slot Surface-Mounted PM Motors. IEEE Transactions on Industry Applications, 2013, 49, 1325-1332.	4.9	19
125	Choice of flux-barriers position in synchronous reluctance machines. , 2017, , .		19
126	Design methodology for highâ€speed synchronous reluctance machines. IET Electric Power Applications, 2018, 12, 1110-1116.	1.8	19

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127	Effect of stator and rotor saturation on sensorless rotor position detection. , 2011, , .		18
128	Permanent magnet volume minimization in permanent magnet assisted synchronous reluctance motors. , 2013, , .		18
129	Sensitivity analysis of torque ripple reduction of synchronous reluctance and interior PM motors. , 2013, , .		18
130	Synchronous reluctance machine analytical model optimization and validation through finite element analysis. , 2016, , .		18
131	Synchronous motors for traction applications. , 2017, , .		18
132	High speed motors: A comparison between synchronous PM and reluctance machines. , 2017, , .		18
133	Analytical Energy-Based Approaches for Cogging Torque Calculation in Surface-Mounted PM Motors. IEEE Transactions on Magnetics, 2019, 55, 1-10.	2.1	18
134	Optimised Design of Permanent Magnet Assisted Synchronous Reluctance Machines for Household Appliances. IEEE Transactions on Energy Conversion, 2021, 36, 3084-3095.	5.2	18
135	Ringed-pole permanent magnet synchronous motor for position sensorless drives. , 2009, , .		17
136	Relationship Between Rotor Losses and Size of Permanent-Magnet Machines. IEEE Transactions on Industry Applications, 2013, 49, 2015-2023.	4.9	17
137	Iron Losses Reduction in Synchronous Motors with Anisotropic Rotor. , 2008, , .		16
138	Multi-objective optimization of an Interior PM motor for a high-performance drive. , 2012, , .		16
139	Design and tests on a fractional-slot induction machine. , 2012, , .		16
140	Electric vehicle traction based on a PM assisted synchronous reluctance motor. , 2014, , .		16
141	Performance comparison of fractional slot concentrated winding spoke type synchronous motors with different slot-pole combinations. , 2015, , .		16
142	Analysis and Experimental Tests of the Sensorless Capability of a Fractional-Slot Inset PM Motor. IEEE Transactions on Industry Applications, 2015, 51, 224-231.	4.9	16
143	A Comparison between Hybrid Excitation and Interior Permanent Magnet Motors. , 2021, , .		16

144 Time optimal current control for PMSM drives. , 0, , .

#	Article	IF	CITATIONS
145	Potentials and limits of high speed PM motors. , 0, , .		15
146	The steering effect PM motor drives for automotive systems. IEEE Industry Applications Magazine, 2008, 14, 40-48.	0.4	15
147	Six-phase supply feasibility using a PM fractional-slot dual winding machine. , 2010, , .		15
148	Simple and efficient model for slotless eccentric surfaceâ€mounted PM machines. IET Electric Power Applications, 2017, 11, 631-639.	1.8	15
149	Analytical Modeling of No-Load Eccentric Slotted Surface-Mounted PM Machines: Cogging Torque and Radial Force. IEEE Transactions on Magnetics, 2017, 53, 1-8.	2.1	15
150	Design and Analysis of Normal Saliency IPM Spoke Motor. IEEE Transactions on Industry Applications, 2020, , 1-1.	4.9	15
151	Comparative Study of Non-Rare-Earth and Rare-Earth PM Motors for EV Applications. Energies, 2022, 15, 2711.	3.1	15
152	Thermal analysis of a run-capacitor single-phase induction motor. IEEE Transactions on Industry Applications, 2003, 39, 457-465.	4.9	14
153	Magnetic loading of fractional-slot three phase PM motors with non-overlapped coils. , 2006, , .		14
154	PM motors for hybrid electric vehicles. , 2008, , .		14
155	Permanent magnet volume minimization of spoke type fractional slot synchronous motors. , 2014, , .		14
156	On the analytical estimation of the airgap field in synchronous reluctance machine. , 2014, , .		14
157	Synchronous Reluctance Motor with Dual Three-Phase Winding for Fault- Tolerant Applications. , 2018, , .		14
158	Design criteria of high efficiency SPM synchronous motors. , 0, , .		13
159	A ringed-pole SPM motor for sensorless drives - electromagnetic analysis, prototyping and tests. , 2010, , .		13
160	Sensorless capability of fractional-slot surface-mounted PM motors. , 2011, , .		13
161	Small-signal finite-element modeling of synchronous machines for sensorless applications. , 2012, , .		13
162	Finite-element analysis of electrical machines for sensorless drives with signal injection. , 2012, , .		13

#	Article	IF	CITATIONS
163	Comparison of different synchronous machines for sensorless drives. , 2013, , .		13
164	FE-aided analytical method to predict the capabilities of line-start synchronous motors. , 2014, , .		13
165	Analysis and Tests of the Sensorless Rotor Position Detection of Ringed-Pole Permanent-Magnet Motor. IEEE Transactions on Industry Applications, 2014, 50, 3278-3284.	4.9	13
166	Optimization of a traction PMASR motor according to a given driving cycle. , 2014, , .		13
167	Direct Analysis of Induction Motor Using Finite Element. , 2018, , .		13
168	Induction Motor Mapping Using Rotor Field-Oriented Analysis Technique. , 2019, , .		13
169	Analytical Power Limits Curves of High-Speed Synchronous Reluctance Machines. IEEE Transactions on Industry Applications, 2019, 55, 1342-1350.	4.9	13
170	Design and Optimization Techniques in Performance Improvement of Line-Start Permanent Magnet Synchronous Motors: A Review. IEEE Transactions on Magnetics, 2021, 57, 1-14.	2.1	13
171	Field oriented control of induction motor: A direct analysis using finite element. , 2008, , .		12
172	IPM Machine Drive Design and Tests for an Integrated Starter-Alternator Application. , 2008, , .		12
173	Configurations of fractional-slot IPM Motors with dual three-phase winding. , 2009, , .		12
174	Torque components in integral- and fractional-slot IPM machines. , 2011, , .		12
175	A robust integrated starter/alternator drive adopting a synchronous reluctance machine for automotive applications. , 2014, , .		12
176	Methods to Improve the Cogging Torque Robustness Under Manufacturing Tolerances for the Permanent Magnet Synchronous Machine. IEEE Transactions on Energy Conversion, 2021, 36, 2152-2162.	5.2	12
177	Analysis and design of a brushless motor for high speed operation. , 0, , .		11
178	Design procedure of a vector controlled induction motor for flux-weakening operations. , 0, , .		11
179	Design procedure of IPM motor drive for railway traction. , 2011, , .		11
180	Formula SAE electric competition: Electrical motor design. , 2013, , .		11

#	Article	IF	CITATIONS
181	Robust optimization of a traction PMASR motor according to given driving cycles. , 2014, , .		11
182	A Fast and Direct Analysis of Three-Phase Induction Motors Using Finite Element. , 2018, , .		11
183	Induction Motor Analysis Using Magnetostatic Finite Element Simulations Considering Skewing. , 2019, , .		11
184	Impact of Geometry on the Rotor Iron Losses in Synchronous Reluctance Motors. IEEE Transactions on Industry Applications, 2019, 55, 5865-5872.	4.9	11
185	Experimental Tests of Dual Three-Phase Synchronous Reluctance Motor Under Half-Control Mode. IEEE Transactions on Industry Applications, 2021, 57, 5887-5893.	4.9	11
186	PM motor drives for steer-by-wire applications. , 0, , .		10
187	MMF Harmonics Effect on the Embedded FE-Analytical Computation of PM Motors. Conference Record - IAS Annual Meeting (IEEE Industry Applications Society), 2007, , .	0.0	10
188	Thermal analysis of dual three-phase machines under faulty operations. , 2011, , .		10
189	On the proprieties of the differential cross-saturation inductance in synchronous machines. , 2015, , .		10
190	Electromagnetic/Thermal Design Procedure of an Aerospace Electric Propeller. IEEE Transactions on Industry Applications, 2015, 51, 4364-4371.	4.9	10
191	Methods to Reduce the Computational Burden of Robust Optimization for Permanent Magnet Motors. IEEE Transactions on Energy Conversion, 2020, 35, 2116-2128.	5.2	10
192	Comparison of Fault Characteristics According to Winding Configurations for Dual Three-Phase Synchronous Reluctance Motor. IEEE Transactions on Industry Applications, 2021, 57, 2398-2406.	4.9	10
193	Dynamic Performance Enhancement of a Renewable Energy System for Grid Connection and Stand-Alone Operation with Battery Storage. Energies, 2022, 15, 1002.	3.1	10
194	Enhanced Control and Power Management for a Renewable Energy-Based Water Pumping System. IEEE Access, 2022, 10, 36028-36056.	4.2	10
195	Tubular linear permanent magnet motors: an overall comparison. , 0, , .		9
196	Relationship between rotor losses and size of permanent magnet machines. , 2011, , .		9
197	PM synchronous machine comparison for light electric vehicles. , 2014, , .		9
198	Experimental comparison of PM assisted synchronous reluctance motors. , 2014, , .		9

#	Article	IF	CITATIONS
199	Comparison of Fault Characteristics for Dual Three-Phase Synchronous Reluctance Motor. , 2019, , .		9
200	Back EMF improvement and force ripple reduction in PM linear motor drives. , 0, , .		8
201	PM Motors for Very High Dynamic Applications. , 0, , .		8
202	Hybrid electric propulsion system using submersed SPM machine. , 2008, , .		8
203	Experimental comparison between two fault-tolerant fractional-slot multiphase PM motor drives. , 2010, , .		8
204	Impact of the rotor yoke geometry on rotor losses in permanent magnet machines. , 2010, , .		8
205	Development of a hybrid human-electric propulsion system for a velomobile. , 2013, , .		8
206	The nature of the torque ripple in fractional-slot synchronous PMAREL machines. , 2016, , .		8
207	High torque density PM motor for racing applications. , 2017, , .		8
208	Analysis of Self-Excited PM-Assisted Reluctance Generators. IEEE Transactions on Energy Conversion, 2018, 33, 877-885.	5.2	8
209	Low Inductance Effects on Electric Drives using Slotless Permanent Magnet Motors: A Framework for Performance Analysis. , 2019, , .		8
210	Parametric Design and Optimization of Magnetic Gears With Differential Evolution Method. IEEE Transactions on Industry Applications, 2019, 55, 3445-3452.	4.9	8
211	Optimal Design and Experimental Validation of a Synchronous Reluctance Machine for Fault-Tolerant Applications. , 2019, , .		8
212	Hybrid-Excited PM Motor for Electric Vehicle. Energies, 2021, 14, 916.	3.1	8
213	A Review about Flux-Weakening Operating Limits and Control Techniques for Synchronous Motor Drives. Energies, 2022, 15, 1930.	3.1	8
214	Analysis of asynchronous machines for direct drive wind power generation. , 2009, , .		7
215	Rotor flux-barrier geometry design to reduce iron losses in synchronous IPM motors under FW operations. , 2009, , .		7
216	Permanent Magnet Synchronous Motors. The Electrical Engineering Handbook, 2011, , 1-46.	0.2	7

#	Article	IF	CITATIONS
217	Performance of Five-phase Motor Drive under Post-fault Operations. Electric Power Components and Systems, 2011, 39, 1302-1314.	1.8	7
218	Structural analysis of the interior PM rotor considering both static and fatigue loading. , 2012, , .		7
219	Thermal analysis of duplex 3-phase induction motor under fault operating conditions. , 2012, , .		7
220	Analysis and tests of the sensorless rotor position detection of ringed-pole PM motor. , 2012, , .		7
221	Investigation on the self-sensing capability of a fractional-slot inset PM motor. , 2013, , .		7
222	Torque and Power Rating of a Wind-Power PM Generator Drive for Maximum Profit-to-Cost Ratio. IEEE Transactions on Industry Applications, 2013, 49, 866-872.	4.9	7
223	Optimal selection of PM flux linkage in a PM assisted synchronous reluctance machine. , 2014, , .		7
224	An Integrated Starter-Alternator Based on a Sensorless Synchronous Reluctance Machine Drive. , 2015, , .		7
225	A high speed PM generator for an Organic Rankine Cycle system. , 2017, , .		7
226	High-Torque Low-Speed Permanent Magnet Assisted Synchronous Reluctance Motor Design. , 2019, , .		7
227	Hybrid Excitation PM Synchronous Motors: Part I – Per Unit Analysis. IEEE Transactions on Energy Conversion, 2022, 37, 487-494.	5.2	7
228	Homothetic Design in Synchronous Reluctance Machines and Effects on Torque Ripple. IEEE Transactions on Energy Conversion, 2021, 36, 2195-2205.	5.2	7
229	High speed drive using a slotless PM motor. , 0, , .		6
230	Thermal assisted finite element analysis of electrical machines. , 2008, , .		6
231	Average and oscillating torque determination in fractional-slot PM motors. , 2010, , .		6
232	IM rotor parameters analysis with an intentionally created saliency. , 2010, , .		6
233	Torque/power rating design of an IPM machine for maximum profit-to-cost ratio in wind power generation. , 2011, , .		6
234	Ring losses evaluation in ringed pole PM motors. , 2013, , .		6

#	Article	IF	CITATIONS
235	Procedure for fast electromagnetic design of axial flux permanent magnet machines. , 2014, , .		6
236	Analytical comparison of synchronous reluctance and surface permanent magnet machines with rotor eccentricity. , 2015, , .		6
237	Ring Losses Evaluation in Ringed-Pole PM Motors. IEEE Transactions on Industry Applications, 2015, 51, 3686-3695.	4.9	6
238	lron saturation impact on high frequency sensorless control of synchronous permanent magnets motor. , 2016, , .		6
239	Analytical approach to determine the power limit of high-speed synchronous reluctance machines. , 2017, , .		6
240	Synchronous Reluctance Motor Iron Losses: Analytical Model and Optimization. , 2018, , .		6
241	Fault Analysis for Dual Three-Phase Synchronous Reluctance Motor. , 2019, , .		6
242	Alternatives to Replace Rare-Earth Permanent Magnet Motors in Direct Drive Applications. , 2020, , .		6
243	Direct Analysis of Three-Phase Induction Motor Considering Rotor Parameters' Variation and Stator Belt Harmonics Effect. IEEE Transactions on Industry Applications, 2020, 56, 3559-3570.	4.9	6
244	Hybrid Excitation PM Synchronous Motors: Part II — Finite Element Analysis. IEEE Transactions on Energy Conversion, 2022, 37, 495-504.	5.2	6
245	Cage Losses in Induction Motors Considering Harmonics: A New Finite Element Procedure and Comparison With the Time-Domain Approach. IEEE Transactions on Industry Applications, 2022, 58, 1931-1940.	4.9	6
246	Improving the Dynamic Performance of a Variable Speed DFIG for Energy Conversion Purposes Using an Effective Control System. Processes, 2022, 10, 456.	2.8	6
247	Torque Harmonic Compensation in a Synchronous Reluctance Motor. , 0, , .		5
248	Rotor design arrangement of SPM motors for the sensorless control at low speed and standstill. , 2010, , .		5
249	Optimization of IPM motors with Machaon rotor flux barriers. , 2010, , .		5
250	Sensorless rotor position detection capability of a dual three-phase fractional-slot IPM machine. , 2011, , .		5
251	Analysis and experimental tests of the sensorless capability of a fractional-slot inset PM motor. , 2012, , .		5

252 Energy efficiency improvement adopting synchronous motors. , 2013, , .

Nicola Bianchi

#	Article	IF	CITATIONS
253	Outer rotor IPM generator with wide constant power region for automotive applications. , 2014, , .		5
254	Comparison between synchronous reluctance and interior permanent magnet motors with eccentricity. , 2015, , .		5
255	Magnetic field analytical computation in synchronous reluctance machines considering the iron saturation. , 2016, , .		5
256	Secondary saliencies decoupling technique for self-sensing integrated multi-drives. , 2016, , .		5
257	A Review on Magnetic Gears: Topologies, Computational Models and Design Aspects. , 2018, , .		5
258	Eccentric Reluctance and Permanent Magnet Synchronous Machines Comparison. IEEE Transactions on Industry Applications, 2018, 54, 5760-5771.	4.9	5
259	A High Speed PM Generator for an Organic Rankine Cycle System. IEEE Transactions on Industry Applications, 2019, 55, 4633-4642.	4.9	5
260	Design and Optimization of a PMASR Motor for Low-Voltage E-Scooter Applications. , 2019, , .		5
261	The Formula SAE Electric Vehicle Competition: A High-Torque Density Permanent Magnet Motor. IEEE Industry Applications Magazine, 2020, 26, 76-86.	0.4	5
262	Electro-Magnetic and Structural Analysis of Six-Pole Hybrid-Excited Permanent Magnet Motors. Electronics (Switzerland), 2021, 10, 2051.	3.1	5
263	A computationally efficient surrogate model based robust optimization for permanent magnet synchronous machines. IEEE Transactions on Energy Conversion, 2022, , 1-1.	5.2	5
264	New Perspectives for Electrical Motors in Adjustable Speed Drives. EPE Journal (European Power) Tj ETQq0 0 0 r	gBT/Qverl	ock ₄ 10 Tf 50 3
265	A rapid prediction of IM performance using a combined analytical and finite element analysis. , 2007, , .		4
266	A finite-element procedure to compute variable speed induction machine performance. , 2009, , .		4
267	Electromagnetic/thermal design procedure of an aerospace electric propeller. , 2015, , .		4
268	Geometry analysis and optimization of PM-assisted reluctance motors. , 2016, , .		4
269	Analysis and Test of the Sensorless Capability ofÂInduction Motors With Created Saliency. IEEE Transactions on Industry Applications, 2016, 52, 2186-2193.	4.9	4
270	Investigation of self-excitation in reluctance generators. , 2017, , .		4

#	Article	IF	CITATIONS
271	Rotor losses reduction in high speed PM generators for organic rankine cycle systems. , 2017, , .		4
272	A Parallel Analytical Computation of Synchronous Reluctance Machine. , 2018, , .		4
273	High-Speed PM Generators for Organic Rankine Cycle Systems: Reduction of Eddy Current Rotor Losses. IEEE Transactions on Industry Applications, 2019, 55, 5800-5808.	4.9	4
274	Design Optimization and Analysis of a Synchronous Reluctance Machine for Fault-Tolerant Applications. , 2019, , .		4
275	Modeling and Investigation of Self-Excited Reluctance Generators for Wind Applications. IEEE Transactions on Industry Applications, 2019, 55, 5809-5817.	4.9	4
276	Efficiency Maps Computation and Comparison Including Thermal Limits. , 2019, , .		4
277	Analysis and Design of Dual-Rotor Synchronous Reluctance Machine. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2021, 9, 4376-4383.	5.4	4
278	Cuckoo Search Algorithm for Multi-Objective Optimization of Transient Starting Characteristics of a Self-Starting HVPMSM. IEEE Transactions on Energy Conversion, 2021, 36, 1861-1872.	5.2	4
279	Direct Drive Applications: Possible Replacement of Rare-Earth Permanent Magnet Motors. Energies, 2021, 14, 8058.	3.1	4
280	Thermal analysis of a run-capacitor single-phase induction motor. , 0, , .		3
281	Design and Control of an Axial Flux Machine for a Wide Flux-Weakening Operation Region. Conference Record - IAS Annual Meeting (IEEE Industry Applications Society), 2007, , .	0.0	3
282	Sensorless-Oriented-Design of PM Motors. Conference Record - IAS Annual Meeting (IEEE Industry) Tj ETQq0 0 0	rgBT/Ove	erlogk 10 Tf 50
283	Lamination Design of a Set of Induction Motors for Elevator Systems. , 2007, , .		3
284	Experimental tests on a 12-slot 8-pole Integrated Starter-Alternator. , 2008, , .		3
285	Thermal analysis of a five-phase motor under faulty operations. , 2011, , .		3
286	Rotor Iron Losses in High-Speed Synchronous Reluctance Motors. , 2018, , .		3
287	IPM Spoke Motor Performance Improvement Using a Normal Saliency Rotor Design. , 2018, , .		3
288	Modeling and Investigation of Self-Excited Reluctance Generators for Wind Applications. , 2018, , .		3

Nicola Bianchi

#	Article	IF	CITATIONS
289	Electromagnetic-thermal coupling applied to the analysis of the heat transfer in a traction motor. , 2018, , .		3
290	Self-Sensing-Oriented Optimization of Synchronous Reluctance Machine Design. , 2019, , .		3
291	Scalability of Synchronous Reluctance Machines Considering Thermal Performance. , 2019, , .		3
292	Design and Evaluation of a Short-Circuit Rotor-Ring for Enhanced Self-Sensing Capability in a Slotless PM Motor. IEEE Transactions on Industrial Electronics, 2020, 67, 3462-3471.	7.9	3
293	Two Approaches in the Use of Ferrites in Assisted Reluctance Machines. , 2020, , .		3
294	A Complete and Fast Analysis Procedure for Three-Phase Induction Motors Using Finite Element, Considering Skewing and Iron Losses. Applied Sciences (Switzerland), 2021, 11, 2428.	2.5	3
295	High-Speed Synchronous Reluctance Motor for Electric-Spindle Application. , 2020, , .		3
296	Measurements and simulation of induction machines flux linkage characteristics adopting rotor field orientation. , 2020, , .		3
297	Comparison of Dual Three-Phase Synchronous Reluctance Motor under Half-Control Mode according to Winding Configurations. , 2020, , .		3
298	A method to estimate the worst-case torque ripple under manufacturing uncertainties for permanent magnet synchronous machines. , 2020, , .		3
299	A Permanent Magnet Assembling Approach to Mitigate the Cogging Torque for Permanent Magnet Machines Considering Manufacturing Uncertainties. Energies, 2022, 15, 2154.	3.1	3
300	Optimum Current Waveform for Minimizing Torque Ripple of SPM Motors. Electric Power Components and Systems, 2004, 32, 435-451.	1.8	2
301	MMF Harmonics Effect on the Embedded FE-Analytical Computation of PM Motors. Conference Record - IAS Annual Meeting (IEEE Industry Applications Society), 2007, , .	0.0	2
302	Finite element modeling of induction motor for variable speed drives. , 2008, , .		2
303	A design-oriented model of doubly-fed induction machine. , 2011, , .		2
304	Analysis of torque versus current capability of reluctance and interior PM machines under limited current and flux-linkage operation. , 2014, , .		2
305	An inverse approach for inter-turn fault detection in asynchronous machines using magnetic pendulous oscillation technique. , 2015, , .		2
306	Comparison between synchronous machines with eccentricity: Reluctance and Permanent Magnets. , 2016, , .		2

#	Article	IF	CITATIONS
307	An improved analytical model of eccentric synchronous reluctance machines considering the iron saturation and slotting effect. , 2016, , .		2
308	Improved analytical estimation of rotor losses in high-speed PM synchronous machines. , 2016, , .		2
309	Analysis Guideline to Determine Capabilities of IPM Motors for Automotive Application. , 2019, , .		2
310	Stator fault diagnosis by reactive power in dual three-phase reluctance motors. , 2019, , .		2
311	Bonded Magnets in PM-Assisted Synchronous Reluctance Machines: Performance Dependence on the Production Technology. , 2019, , .		2
312	Design and Optimization of Synchronous Motors for Low-Voltage Electric Vehicles. , 2019, , .		2
313	Performance Analysis of Self-Excited Reluctance Generating System Using Power Balance. IEEE Transactions on Energy Conversion, 2019, 34, 673-679.	5.2	2
314	Measures and Simulations of Induction Machines Flux Linkage Characteristics Based on Rotor Field Orientation. IEEE Transactions on Industry Applications, 2021, 57, 4686-4693.	4.9	2
315	Sensorless-Oriented-Design of PM Motors. Conference Record - IAS Annual Meeting (IEEE Industry) Tj ETQq1 1	0.784314 i 0.014 i	rgBŢ /Overlac
316	Optimal drive and machine sizing for a self starting, vertical axis, low power wind generator. , 2012, , .		1
317	Induction motor with an intentionally created saliency for sensorless applications. , 2013, , .		1
318	High frequency d-q model of synchronous machines for sensorless control. , 2014, , .		1
319	Industrial-scale motor cogging torque control for a high-volume motor manufacturing. , 2015, , .		1
320	Design and tests of a four-layer fractional-slot Interior Permanent Magnet motor. , 2015, , .		1
321	Replacing SPM by PMAREL machines in low-speed high-torque applications. , 2016, , .		1
322	Geometry of line start synchronous motors suitable for various pole combinations. , 2016, , .		1
323	Parameters identification of multi-windings induction machines. , 2016, , .		1
324	Unified equivalent MMF concept for torque analysis of AC machines. , 2017, , .		1

19

#	Article	IF	CITATIONS
325	The influence of rotor design on active flux-based sensorless synchronous reluctance motor drives. , 2017, , .		1
326	High-Speed Synchronous Reluctance Motors: Computation of the Power Limits by Means of Reluctance Networks. , 2018, , .		1
327	A Rapid Estimation of the Rotor Losses in High Speed Synchronous PM Machines. , 2018, , .		1
328	Parametric Design and Optimization of Magnetic Gears with Differential Evolution Method. , 2018, , .		1
329	The Influence of the Rotor Geometry on Synchronous Reluctance Machine Vibration. , 2019, , .		1
330	The Influence of Flux-Barriers Distribution on Vibrations in Synchronous Reluctance Machine. , 2019, ,		1
331	Experiment-Based Performance Analysis for Dual Three-Phase Synchronous Reluctance Motor According to Different Winding Configurations. , 2020, , .		1
332	Design and Control of an Axial Flux Machine for a Wide Flux-Weakening Operation Region. Conference Record - IAS Annual Meeting (IEEE Industry Applications Society), 2007, , .	0.0	0
333	Space vector harmonic analysis of a five-phase PM motor including asymmetries. , 2009, , .		Ο
334	Analysis and test of the sensorless capability of induction motors with created saliency. , 2014, , .		0
335	Design and test of an electric minidumper. , 2015, , .		Ο
336	Fractional-slot PM assisted reluctance motors: Configuration comparison and optimization. , 2016, , .		0
337	Axial eccentric SynRel and SPM motors analytical models validation using 3D finite element. , 2017, , .		Ο
338	General Magnetic Model for the Analysis and Optimization of Multiple Barrier Rotors. , 2018, , .		0
339	Saliency-Enhanced Spoke-Type Rotor Geometry for Permanent Magnet Volume Reduction in Hybrid and Electric Vehicle Motors. , 2018, , .		0
340	Induction Motor Design Workflow for Variable Frequency and Constant Voltage Applications. , 2020, ,		0
341	A Vector-Phasor Combined With Superposition Method for Analyzing 3D-Space Topology for Leakage Flux and Losses Suppression of a Generator. IEEE Transactions on Energy Conversion, 2022, 37, 912-920.	5.2	0
342	Different Approaches in the Use of Ferrites in Assisted Reluctance Machines. IEEE Transactions on Industry Applications, 2022, 58, 6136-6144.	4.9	0