Nicola Bianchi

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/6337391/publications.pdf

Version: 2024-02-01

342	11,202	32410 55	49824 91
papers	citations	h-index	g-index

342	342	342	3426
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Hybrid Excitation PM Synchronous Motors: Part II â€" Finite Element Analysis. IEEE Transactions on Energy Conversion, 2022, 37, 495-504.	3.7	6
2	Hybrid Excitation PM Synchronous Motors: Part I â€" Per Unit Analysis. IEEE Transactions on Energy Conversion, 2022, 37, 487-494.	3.7	7
3	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.	3.7	0
4	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.	3.3	6
5	A computationally efficient surrogate model based robust optimization for permanent magnet synchronous machines. IEEE Transactions on Energy Conversion, 2022, , 1-1.	3.7	5
6	Dynamic Performance Enhancement of a Renewable Energy System for Grid Connection and Stand-Alone Operation with Battery Storage. Energies, 2022, 15, 1002.	1.6	10
7	Synchronous Reluctance Machines: A Comprehensive Review and Technology Comparison. Proceedings of the IEEE, 2022, 110, 382-399.	16.4	38
8	Enhanced Control and Power Management for a Renewable Energy-Based Water Pumping System. IEEE Access, 2022, 10, 36028-36056.	2.6	10
9	Improving the Dynamic Performance of a Variable Speed DFIG for Energy Conversion Purposes Using an Effective Control System. Processes, 2022, 10, 456.	1.3	6
10	A Permanent Magnet Assembling Approach to Mitigate the Cogging Torque for Permanent Magnet Machines Considering Manufacturing Uncertainties. Energies, 2022, 15, 2154.	1.6	3
11	A Review about Flux-Weakening Operating Limits and Control Techniques for Synchronous Motor Drives. Energies, 2022, 15, 1930.	1.6	8
12	Comparative Study of Non-Rare-Earth and Rare-Earth PM Motors for EV Applications. Energies, 2022, 15, 2711.	1.6	15
13	Different Approaches in the Use of Ferrites in Assisted Reluctance Machines. IEEE Transactions on Industry Applications, 2022, 58, 6136-6144.	3.3	0
14	Optimised Design of Permanent Magnet Assisted Synchronous Reluctance Machines for Household Appliances. IEEE Transactions on Energy Conversion, 2021, 36, 3084-3095.	3.7	18
15	Hybrid-Excited PM Motor for Electric Vehicle. Energies, 2021, 14, 916.	1.6	8
16	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.	1.3	3
17	A Comparison between Hybrid Excitation and Interior Permanent Magnet Motors. , 2021, , .		16
18	Comparison of Fault Characteristics According to Winding Configurations for Dual Three-Phase Synchronous Reluctance Motor. IEEE Transactions on Industry Applications, 2021, 57, 2398-2406.	3.3	10

#	Article	IF	Citations
19	Analysis and Design of Dual-Rotor Synchronous Reluctance Machine. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2021, 9, 4376-4383.	3.7	4
20	Electro-Magnetic and Structural Analysis of Six-Pole Hybrid-Excited Permanent Magnet Motors. Electronics (Switzerland), 2021, 10, 2051.	1.8	5
21	Homothetic Design in Synchronous Reluctance Machines and Effects on Torque Ripple. IEEE Transactions on Energy Conversion, 2021, 36, 2195-2205.	3.7	7
22	Measures and Simulations of Induction Machines Flux Linkage Characteristics Based on Rotor Field Orientation. IEEE Transactions on Industry Applications, 2021, 57, 4686-4693.	3.3	2
23	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.	3.7	4
24	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.	3.7	12
25	Design and Optimization Techniques in Performance Improvement of Line-Start Permanent Magnet Synchronous Motors: A Review. IEEE Transactions on Magnetics, 2021, 57, 1-14.	1.2	13
26	Experimental Tests of Dual Three-Phase Synchronous Reluctance Motor Under Half-Control Mode. IEEE Transactions on Industry Applications, 2021, 57, 5887-5893.	3.3	11
27	Direct Drive Applications: Possible Replacement of Rare-Earth Permanent Magnet Motors. Energies, 2021, 14, 8058.	1.6	4
28	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.	5.2	3
29	Two Approaches in the Use of Ferrites in Assisted Reluctance Machines. , 2020, , .		3
30	Experiment-Based Performance Analysis for Dual Three-Phase Synchronous Reluctance Motor According to Different Winding Configurations. , 2020, , .		1
31	Alternatives to Replace Rare-Earth Permanent Magnet Motors in Direct Drive Applications. , 2020, , .		6
32	Methods to Reduce the Computational Burden of Robust Optimization for Permanent Magnet Motors. IEEE Transactions on Energy Conversion, 2020, 35, 2116-2128.	3.7	10
33	The Formula SAE Electric Vehicle Competition: A High-Torque Density Permanent Magnet Motor. IEEE Industry Applications Magazine, 2020, 26, 76-86.	0.3	5
34	A Method for Evaluating the Worst-Case Cogging Torque Under Manufacturing Uncertainties. IEEE Transactions on Energy Conversion, 2020, 35, 1837-1848.	3.7	29
35	Direct Analysis of Three-Phase Induction Motor Considering Rotor Parametersâ€™ Variation and Stator Belt Harmonics Effect. IEEE Transactions on Industry Applications, 2020, 56, 3559-3570.	3.3	6
36	Design and Analysis of Normal Saliency IPM Spoke Motor. IEEE Transactions on Industry Applications, 2020, , 1-1.	3.3	15

#	Article	IF	Citations
37	High-Speed Synchronous Reluctance Motor for Electric-Spindle Application. , 2020, , .		3
38	Measurements and simulation of induction machines flux linkage characteristics adopting rotor field orientation. , 2020, , .		3
39	Comparison of Dual Three-Phase Synchronous Reluctance Motor under Half-Control Mode according to Winding Configurations. , 2020, , .		3
40	Induction Motor Design Workflow for Variable Frequency and Constant Voltage Applications. , 2020, , .		0
41	A method to estimate the worst-case torque ripple under manufacturing uncertainties for permanent magnet synchronous machines. , 2020, , .		3
42	Analysis Guideline to Determine Capabilities of IPM Motors for Automotive Application. , 2019, , .		2
43	Fault Analysis for Dual Three-Phase Synchronous Reluctance Motor. , 2019, , .		6
44	Induction Motor Analysis Using Magnetostatic Finite Element Simulations Considering Skewing. , 2019, , .		11
45	High-Speed PM Generators for Organic Rankine Cycle Systems: Reduction of Eddy Current Rotor Losses. IEEE Transactions on Industry Applications, 2019, 55, 5800-5808.	3.3	4
46	Design Optimization and Analysis of a Synchronous Reluctance Machine for Fault-Tolerant Applications. , 2019, , .		4
47	Stator fault diagnosis by reactive power in dual three-phase reluctance motors. , 2019, , .		2
48	A High Speed PM Generator for an Organic Rankine Cycle System. IEEE Transactions on Industry Applications, 2019, 55, 4633-4642.	3.3	5
49	Low Inductance Effects on Electric Drives using Slotless Permanent Magnet Motors: A Framework for Performance Analysis. , 2019, , .		8
50	The Influence of the Rotor Geometry on Synchronous Reluctance Machine Vibration. , 2019, , .		1
51	Design and Optimization of a PMASR Motor for Low-Voltage E-Scooter Applications. , 2019, , .		5
52	Impact of Geometry on the Rotor Iron Losses in Synchronous Reluctance Motors. IEEE Transactions on Industry Applications, 2019, 55, 5865-5872.	3.3	11
53	Bonded Magnets in PM-Assisted Synchronous Reluctance Machines: Performance Dependence on the Production Technology. , 2019, , .		2
54	Modeling and Investigation of Self-Excited Reluctance Generators for Wind Applications. IEEE Transactions on Industry Applications, 2019, 55, 5809-5817.	3.3	4

#	Article	IF	Citations
55	High-Torque Low-Speed Permanent Magnet Assisted Synchronous Reluctance Motor Design. , 2019, , .		7
56	A Review on Magnetic Gears: Topologies, Computational Models, and Design Aspects. IEEE Transactions on Industry Applications, 2019, 55, 4557-4566.	3.3	54
57	Analytical Energy-Based Approaches for Cogging Torque Calculation in Surface-Mounted PM Motors. IEEE Transactions on Magnetics, 2019, 55, 1-10.	1.2	18
58	Parametric Design and Optimization of Magnetic Gears With Differential Evolution Method. IEEE Transactions on Industry Applications, 2019, 55, 3445-3452.	3.3	8
59	Self-Sensing-Oriented Optimization of Synchronous Reluctance Machine Design. , 2019, , .		3
60	Optimal Design and Experimental Validation of a Synchronous Reluctance Machine for Fault-Tolerant Applications. , 2019, , .		8
61	Efficiency Maps Computation and Comparison Including Thermal Limits. , 2019, , .		4
62	Comparison of Fault Characteristics for Dual Three-Phase Synchronous Reluctance Motor. , 2019, , .		9
63	The Influence of Flux-Barriers Distribution on Vibrations in Synchronous Reluctance Machine. , 2019, , .		1
64	Design and Optimization of Synchronous Motors for Low-Voltage Electric Vehicles. , 2019, , .		2
65	Induction Motor Mapping Using Rotor Field-Oriented Analysis Technique. , 2019, , .		13
66	Scalability of Synchronous Reluctance Machines Considering Thermal Performance. , 2019, , .		3
67	Design Criteria of Flux-Barriers in Synchronous Reluctance Machines. IEEE Transactions on Industry Applications, 2019, 55, 2490-2498.	3.3	38
68	Performance Analysis of Self-Excited Reluctance Generating System Using Power Balance. IEEE Transactions on Energy Conversion, 2019, 34, 673-679.	3.7	2
69	Analytical Power Limits Curves of High-Speed Synchronous Reluctance Machines. IEEE Transactions on Industry Applications, 2019, 55, 1342-1350.	3.3	13
70	A Nonlinear Analytical Model for the Rapid Prediction of the Torque of Synchronous Reluctance Machines. IEEE Transactions on Energy Conversion, 2018, 33, 1539-1546.	3.7	25
71	Synchronous Reluctance Machine Optimization for High-Speed Applications. IEEE Transactions on Energy Conversion, 2018, 33, 1266-1273.	3.7	104
72	Analysis of Self-Excited PM-Assisted Reluctance Generators. IEEE Transactions on Energy Conversion, 2018, 33, 877-885.	3.7	8

#	Article	IF	Citations
73	Investigation of Self-Excited Synchronous Reluctance Generators. IEEE Transactions on Industry Applications, 2018, 54, 1360-1369.	3.3	23
74	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.	3.3	99
75	Synchronous Reluctance Motor Iron Losses: Considering Machine Nonlinearity at MTPA, FW, and MTPV Operating Conditions. IEEE Transactions on Energy Conversion, 2018, 33, 1402-1410.	3.7	30
76	Design Guideline of an AC Hairpin Winding. , 2018, , .		75
77	High-Speed Synchronous Reluctance Motors: Computation of the Power Limits by Means of Reluctance Networks. , 2018, , .		1
78	A Parallel Analytical Computation of Synchronous Reluctance Machine. , 2018, , .		4
79	A Rapid Estimation of the Rotor Losses in High Speed Synchronous PM Machines. , 2018, , .		1
80	Synchronous Reluctance Motor with Dual Three-Phase Winding for Fault- Tolerant Applications. , 2018, , .		14
81	Rotor Iron Losses in High-Speed Synchronous Reluctance Motors. , 2018, , .		3
82	IPM Spoke Motor Performance Improvement Using a Normal Saliency Rotor Design. , 2018, , .		3
83	Modeling and Investigation of Self-Excited Reluctance Generators for Wind Applications. , 2018, , .		3
84	General Magnetic Model for the Analysis and Optimization of Multiple Barrier Rotors. , 2018, , .		0
85	Analytical Approach to Design Hairpin Windings in High Performance Electric Vehicle Motors. , 2018, , .		51
86	Direct Analysis of Induction Motor Using Finite Element. , 2018, , .		13
87	Saliency-Enhanced Spoke-Type Rotor Geometry for Permanent Magnet Volume Reduction in Hybrid and Electric Vehicle Motors. , 2018, , .		0
88	Synchronous Reluctance Motor Iron Losses: Analytical Model and Optimization. , 2018, , .		6
89	Parametric Design and Optimization of Magnetic Gears with Differential Evolution Method. , 2018, , .		1
90	A Review on Magnetic Gears: Topologies, Computational Models and Design Aspects. , 2018, , .		5

#	Article	IF	Citations
91	A Fast and Direct Analysis of Three-Phase Induction Motors Using Finite Element. , 2018, , .		11
92	Design methodology for highâ€speed synchronous reluctance machines. IET Electric Power Applications, 2018, 12, 1110-1116.	1.1	19
93	Electromagnetic-thermal coupling applied to the analysis of the heat transfer in a traction motor. , 2018, , .		3
94	Eccentric Reluctance and Permanent Magnet Synchronous Machines Comparison. IEEE Transactions on Industry Applications, 2018, 54, 5760-5771.	3.3	5
95	Nonlinear Analytical Model of Eccentric Synchronous Reluctance Machines Considering the Iron Saturation and Slotting Effect. IEEE Transactions on Industry Applications, 2017, 53, 2007-2015.	3.3	20
96	Simple and efficient model for slotless eccentric surfaceâ€mounted PM machines. IET Electric Power Applications, 2017, 11, 631-639.	1.1	15
97	On the Proprieties of the Differential Cross-Saturation Inductance in Synchronous Machines. IEEE Transactions on Industry Applications, 2017, 53, 991-1000.	3.3	57
98	Geometry Analysis and Optimization of PM-Assisted Reluctance Motors. IEEE Transactions on Industry Applications, 2017, 53, 4338-4347.	3.3	70
99	Line-Start PM-Assisted Synchronous Motor Design, Optimization, and Tests. IEEE Transactions on Industrial Electronics, 2017, 64, 9739-9747.	5.2	73
100	Analytical Modeling of Slotless Eccentric Surface-Mounted PM Machines Using a Conformal Transformation. IEEE Transactions on Energy Conversion, 2017, 32, 658-666.	3.7	21
101	Analytical Modeling of No-Load Eccentric Slotted Surface-Mounted PM Machines: Cogging Torque and Radial Force. IEEE Transactions on Magnetics, 2017, 53, 1-8.	1.2	15
102	Synchronous motors for traction applications. , 2017, , .		18
103	Iron Saturation Impact on High-Frequency Sensorless Control of Synchronous Permanent-Magnet Motor. IEEE Transactions on Industry Applications, 2017, 53, 5470-5478.	3.3	26
104	Unified equivalent MMF concept for torque analysis of AC machines. , 2017, , .		1
105	Investigation of self-excitation in reluctance generators. , 2017, , .		4
106	High torque density PM motor for racing applications. , 2017, , .		8
107	Nonlinear Analytical Computation of the Magnetic Field in Reluctance Synchronous Machines. IEEE Transactions on Industry Applications, 2017, 53, 5373-5382.	3.3	21
108	Axial eccentric SynRel and SPM motors analytical models validation using 3D finite element. , 2017, , .		0

#	Article	IF	Citations
109	A high speed PM generator for an Organic Rankine Cycle system. , 2017, , .		7
110	Analytical approach to determine the power limit of high-speed synchronous reluctance machines. , 2017, , .		6
111	High speed motors: A comparison between synchronous PM and reluctance machines. , 2017, , .		18
112	Rotor losses reduction in high speed PM generators for organic rankine cycle systems. , 2017, , .		4
113	Choice of flux-barriers position in synchronous reluctance machines. , 2017, , .		19
114	The influence of rotor design on active flux-based sensorless synchronous reluctance motor drives. , 2017, , .		1
115	Replacing SPM by PMAREL machines in low-speed high-torque applications. , 2016, , .		1
116	The nature of the torque ripple in fractional-slot synchronous PMAREL machines. , 2016, , .		8
117	Magnetic field analytical computation in synchronous reluctance machines considering the iron saturation. , 2016, , .		5
118	The Rediscovery of Synchronous Reluctance and Ferrite Permanent Magnet Motors. Springer Briefs in Electrical and Computer Engineering, 2016, , .	0.3	116
119	Electric Vehicle Traction Based on Synchronous Reluctance Motors. IEEE Transactions on Industry Applications, 2016, 52, 4762-4769.	3.3	196
120	Comparison between synchronous machines with eccentricity: Reluctance and Permanent Magnets. , 2016, , .		2
121	Geometry of line start synchronous motors suitable for various pole combinations. , 2016, , .		1
122	Secondary saliencies decoupling technique for self-sensing integrated multi-drives. , 2016, , .		5
123	An improved analytical model of eccentric synchronous reluctance machines considering the iron saturation and slotting effect. , 2016, , .		2
124	Improved analytical estimation of rotor losses in high-speed PM synchronous machines. , 2016, , .		2
125	Fractional-slot PM assisted reluctance motors: Configuration comparison and optimization. , 2016, , .		0
126	Geometry analysis and optimization of PM-assisted reluctance motors. , 2016, , .		4

#	Article	IF	Citations
127	Synchronous reluctance machine analytical model optimization and validation through finite element analysis. , 2016, , .		18
128	Parameters identification of multi-windings induction machines. , 2016, , .		1
129	Iron saturation impact on high frequency sensorless control of synchronous permanent magnets motor. , 2016, , .		6
130	Fast synthesis of permanent magnet assisted synchronous reluctance motors. IET Electric Power Applications, 2016, 10, 312-318.	1.1	56
131	An Inverse Approach for Interturn Fault Detection in Asynchronous Machines Using Magnetic Pendulous Oscillation Technique. IEEE Transactions on Industry Applications, 2016, 52, 226-233.	3.3	29
132	Analysis and Test of the Sensorless Capability ofÂInduction Motors With Created Saliency. IEEE Transactions on Industry Applications, 2016, 52, 2186-2193.	3.3	4
133	An Analytical Approach to Design the PM in PMAREL Motors Robust Toward the Demagnetization. IEEE Transactions on Energy Conversion, 2016, 31, 800-809.	3.7	53
134	Design and Analysis of a Novel High-Torque Stator-Segmented SRM. IEEE Transactions on Industrial Electronics, 2016, 63, 1458-1466.	5.2	71
135	Traction PMASR Motor Optimization According to a Given Driving Cycle. IEEE Transactions on Industry Applications, 2016, 52, 209-216.	3.3	104
136	Experimental Comparison of PM-Assisted Synchronous Reluctance Motors. IEEE Transactions on Industry Applications, 2016, 52, 163-171.	3.3	68
137	Design and test of an electric minidumper. , 2015, , .		0
138	On the proprieties of the differential cross-saturation inductance in synchronous machines. , 2015, , .		10
139	An Integrated Starter-Alternator Based on a Sensorless Synchronous Reluctance Machine Drive. , 2015, , .		7
140	Industrial-scale motor cogging torque control for a high-volume motor manufacturing. , 2015, , .		1
141	An inverse approach for inter-turn fault detection in asynchronous machines using magnetic pendulous oscillation technique. , 2015, , .		2
142	Analytical comparison of synchronous reluctance and surface permanent magnet machines with rotor eccentricity. , 2015, , .		6
143	Electromagnetic/Thermal Design Procedure of an Aerospace Electric Propeller. IEEE Transactions on Industry Applications, 2015, 51, 4364-4371.	3.3	10
144	Electromagnetic/thermal design procedure of an aerospace electric propeller. , 2015, , .		4

#	Article	IF	Citations
145	Performance comparison of fractional slot concentrated winding spoke type synchronous motors with different slot-pole combinations. , 2015, , .		16
146	Ring Losses Evaluation in Ringed-Pole PM Motors. IEEE Transactions on Industry Applications, 2015, 51, 3686-3695.	3.3	6
147	Eccentricity in Synchronous Reluctance Motorsâ€"Part II: Different Rotor Geometry and Stator Windings. IEEE Transactions on Energy Conversion, 2015, 30, 754-760.	3.7	33
148	Eccentricity in Synchronous Reluctance Motorsâ€"Part I: Analytical and Finite-Element Models. IEEE Transactions on Energy Conversion, 2015, 30, 745-753.	3.7	56
149	Selection Criteria and Robust Optimization of a Traction PM-Assisted Synchronous Reluctance Motor. IEEE Transactions on Industry Applications, 2015, 51, 4383-4391.	3.3	49
150	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.	1.0	21
151	Design of Synchronous Reluctance Motor for Hybrid Electric Vehicles. IEEE Transactions on Industry Applications, 2015, 51, 3030-3040.	3.3	90
152	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.	3.3	57
153	Design and tests of a four-layer fractional-slot Interior Permanent Magnet motor. , 2015, , .		1
154	High-Frequency dâ€“ q Model of Synchronous Machines for Sensorless Control. IEEE Transactions on Industry Applications, 2015, 51, 3923-3931.	3.3	25
155	Comparison between synchronous reluctance and interior permanent magnet motors with eccentricity. , 2015, , .		5
156	Sensitivity Analysis of Torque Ripple Reduction of Synchronous Reluctance and Interior PM Motors. IEEE Transactions on Industry Applications, 2015, 51, 187-195.	3.3	113
157	Analysis and Experimental Tests of the Sensorless Capability of a Fractional-Slot Inset PM Motor. IEEE Transactions on Industry Applications, 2015, 51, 224-231.	3.3	16
158	Analysis of Rotor Saturation in Synchronous Reluctance and PM-Assisted Reluctance Motors. IEEE Transactions on Industry Applications, 2015, 51, 169-177.	3.3	53
159	Permanent magnet volume minimization of spoke type fractional slot synchronous motors. , 2014, , .		14
160	Procedure for fast electromagnetic design of axial flux permanent magnet machines. , 2014, , .		6
161	Optimal selection of PM flux linkage in a PM assisted synchronous reluctance machine. , 2014, , .		7
162	FE-aided analytical method to predict the capabilities of line-start synchronous motors. , 2014, , .		13

#	Article	IF	Citations
163	Analysis and Tests of the Sensorless Rotor Position Detection of Ringed-Pole Permanent-Magnet Motor. IEEE Transactions on Industry Applications, 2014, 50, 3278-3284.	3.3	13
164	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.	1.1	36
165	Robust optimization of a traction PMASR motor according to given driving cycles. , 2014, , .		11
166	Performance Comparison Between Switching-Flux and IPM Machines With Rare-Earth and Ferrite PMs. IEEE Transactions on Industry Applications, 2014, 50, 3708-3716.	3.3	113
167	High frequency d-q model of synchronous machines for sensorless control. , 2014, , .		1
168	A robust integrated starter/alternator drive adopting a synchronous reluctance machine for automotive applications. , 2014, , .		12
169	Finite-Element Analysis of Electrical Machines for Sensorless Drives With High-Frequency Signal Injection. IEEE Transactions on Industry Applications, 2014, 50, 1871-1879.	3.3	28
170	Electric vehicle traction based on a PM assisted synchronous reluctance motor. , 2014, , .		16
171	PM synchronous machine comparison for light electric vehicles. , 2014, , .		9
172	Experimental comparison of PM assisted synchronous reluctance motors. , 2014, , .		9
173	On the analytical estimation of the airgap field in synchronous reluctance machine. , 2014, , .		14
174	Interior PM Machines Using Ferrite to Replace Rare-Earth Surface PM Machines. IEEE Transactions on Industry Applications, 2014, 50, 979-985.	3.3	111
175	Structural Analysis of the Interior PM Rotor Considering Both Static and Fatigue Loading. IEEE Transactions on Industry Applications, 2014, 50, 253-260.	3.3	59
176	Core Axial Lengthening as Effective Solution to Improve the Induction Motor Efficiency Classes. IEEE Transactions on Industry Applications, 2014, 50, 218-225.	3.3	41
177	Optimization of a traction PMASR motor according to a given driving cycle. , 2014, , .		13
178	Outer rotor IPM generator with wide constant power region for automotive applications. , 2014, , .		5
179	Design of a Low-Torque-Ripple Fractional-Slot Interior Permanent-Magnet Motor. IEEE Transactions on Industry Applications, 2014, 50, 1801-1808.	3.3	64
180	Analysis of torque versus current capability of reluctance and interior PM machines under limited current and flux-linkage operation. , 2014, , .		2

#	Article	IF	Citations
181	Analysis and test of the sensorless capability of induction motors with created saliency. , 2014, , .		0
182	Sensorless Capability of Fractional-Slot Surface-Mounted PM Motors. IEEE Transactions on Industry Applications, 2013, 49, 1325-1332.	3.3	19
183	Energy efficiency improvement adopting synchronous motors. , 2013, , .		5
184	Design of synchronous reluctance motor for hybrid electric vehicles. , 2013, , .		27
185	Synchronous reluctance and interior permanent magnet motors. , 2013, , .		25
186	Permanent magnet volume minimization in permanent magnet assisted synchronous reluctance motors. , 2013, , .		18
187	Relationship Between Rotor Losses and Size of Permanent-Magnet Machines. IEEE Transactions on Industry Applications, 2013, 49, 2015-2023.	3.3	17
188	Rotor saturation impact in synchronous reluctance and PM assisted reluctance motors. , 2013, , .		21
189	Thermal Analysis of a Five-Phase Motor Under Faulty Operations. IEEE Transactions on Industry Applications, 2013, 49, 1531-1538.	3.3	39
190	Effect of Stator and Rotor Saturation on Sensorless Rotor Position Detection. IEEE Transactions on Industry Applications, 2013, 49, 1333-1342.	3.3	69
191	Investigation on the self-sensing capability of a fractional-slot inset PM motor. , 2013, , .		7
192	Formula SAE electric competition: Electrical motor design. , 2013, , .		11
193	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.	3.3	7
194	Theory and Design of Fractional-Slot Multilayer Windings. IEEE Transactions on Industry Applications, 2013, 49, 841-849.	3.3	152
195	Considerations on Selecting Fractional-Slot Nonoverlapped Coil Windings. IEEE Transactions on Industry Applications, 2013, 49, 1316-1324.	3.3	71
196	Comparison of different synchronous machines for sensorless drives. , 2013, , .		13
197	Ring losses evaluation in ringed pole PM motors. , 2013, , .		6
198	Development of a hybrid human-electric propulsion system for a velomobile. , 2013, , .		8

#	Article	IF	Citations
199	Induction motor with an intentionally created saliency for sensorless applications. , 2013, , .		1
200	Sensitivity analysis of torque ripple reduction of synchronous reluctance and interior PM motors. , 2013, , .		18
201	Small-signal finite-element modeling of synchronous machines for sensorless applications. , 2012, , .		13
202	Structural analysis of the interior PM rotor considering both static and fatigue loading. , 2012, , .		7
203	Finite-element analysis of electrical machines for sensorless drives with signal injection. , 2012, , .		13
204	Impact of the Rotor Yoke Geometry on Rotor Losses in Permanent-Magnet Machines. IEEE Transactions on Industry Applications, 2012, 48, 98-105.	3.3	36
205	Remarks on Torque Estimation Accuracy in Fractional-Slot Permanent-Magnet Motors. IEEE Transactions on Industrial Electronics, 2012, 59, 2565-2572.	5.2	34
206	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.	5.2	168
207	Multi-objective optimization of an Interior PM motor for a high-performance drive. , 2012, , .		16
208	Performance comparison between switching-flux and IPM machine with rare earth and ferrite PMs. , 2012, , .		34
209	Sensorless Rotor Position Detection Capability of a Dual Three-Phase Fractional-Slot IPM Machine. IEEE Transactions on Industry Applications, 2012, 48, 2068-2078.	3.3	49
210	Interior PM machines using Ferrite to substitute rare-earth surface PM machines. , 2012, , .		56
211	Torque ripple reduction in fractional-slot Interior PM machines optimizing the flux-barrier geometries. , 2012, , .		36
212	Thermal analysis of duplex 3-phase induction motor under fault operating conditions. , 2012, , .		7
213	Optimal drive and machine sizing for a self starting, vertical axis, low power wind generator. , 2012, , .		1
214	Analysis and tests of the sensorless rotor position detection of ringed-pole PM motor. , 2012, , .		7
215	Analysis and experimental tests of the sensorless capability of a fractional-slot inset PM motor. , 2012, , .		5
216	Experimental Tests of Dual Three-Phase Induction Motor Under Faulty Operating Condition. IEEE Transactions on Industrial Electronics, 2012, 59, 2041-2048.	5.2	115

#	Article	IF	Citations
217	Design and tests on a fractional-slot induction machine. , 2012, , .		16
218	Design of a low torque ripple fractional-slot interior permanent magnet motor. , 2012, , .		29
219	Thermal analysis of dual three-phase machines under faulty operations. , 2011, , .		10
220	Design procedure of IPM motor drive for railway traction. , 2011, , .		11
221	Core axial lengthening as effective solution to improve the induction motor efficiency classes. , 2011, , .		19
222	Thermal analysis of a five-phase motor under faulty operations. , 2011, , .		3
223	Sensorless capability of fractional-slot surface-mounted PM motors. , 2011, , .		13
224	Torque/power rating design of an IPM machine for maximum profit-to-cost ratio in wind power generation. , 2011, , .		6
225	Sensorless rotor position detection capability of a dual three-phase fractional-slot IPM machine. , 2011, , .		5
226	Torque components in integral- and fractional-slot IPM machines. , 2011, , .		12
227	Relationship between rotor losses and size of permanent magnet machines. , 2011, , .		9
228	Fast Estimation of Line-Start Reluctance Machine Parameters by Finite Element Analysis. IEEE Transactions on Energy Conversion, 2011, 26, 1-8.	3.7	53
229	Rotor Losses Measurements in an Axial Flux Permanent Magnet Machine. IEEE Transactions on Energy Conversion, 2011, 26, 639-645.	3.7	48
230	Variable-Speed Induction Machine Performance Computed Using Finite-Element. IEEE Transactions on Industry Applications, 2011, 47, 789-797.	3.3	49
231	Ringed-Pole Permanent-Magnet Synchronous Motor for Position Sensorless Drives. IEEE Transactions on Industry Applications, 2011, 47, 1759-1766.	3.3	26
232	Six-Phase Supply Feasibility Using a PM Fractional-Slot Dual Winding Machine. IEEE Transactions on Industry Applications, 2011, 47, 2042-2050.	3.3	95
233	Faulty Operations of a PM Fractional-Slot Machine With a Dual Three-Phase Winding. IEEE Transactions on Industrial Electronics, 2011, 58, 3825-3832.	5.2	135
234	Permanent Magnet Synchronous Motors. The Electrical Engineering Handbook, 2011, , 1-46.	0.2	7

#	Article	IF	Citations
235	Optimization of Interior PM Motors With Machaon Rotor Flux Barriers. IEEE Transactions on Magnetics, 2011, 47, 958-961.	1.2	67
236	A design-oriented model of doubly-fed induction machine. , 2011, , .		2
237	Performance of Five-phase Motor Drive under Post-fault Operations. Electric Power Components and Systems, 2011, 39, 1302-1314.	1.0	7
238	Effect of stator and rotor saturation on sensorless rotor position detection. , 2011, , .		18
239	Air-Gap Flux Density Distortion and Iron Losses in Anisotropic Synchronous Motors. IEEE Transactions on Magnetics, 2010, 46, 121-126.	1.2	29
240	Six-phase supply feasibility using a PM fractional-slot dual winding machine. , 2010, , .		15
241	Rotor design arrangement of SPM motors for the sensorless control at low speed and standstill. , 2010, , .		5
242	Experimental comparison between two fault-tolerant fractional-slot multiphase PM motor drives. , 2010, , .		8
243	Impact of the rotor yoke geometry on rotor losses in permanent magnet machines. , 2010, , .		8
244	Optimization of IPM motors with Machaon rotor flux barriers. , 2010, , .		5
245	Design considerations to maximize performance of an IPM motor for a wide flux-weakening region. , 2010, , .		23
246	Considerations on selecting fractionalâ€"slot windings. , 2010, , .		34
247	MMF Harmonics Effect on the Embedded FE Analytical Computation of PM Motors. IEEE Transactions on Industry Applications, 2010, 46, 812-820.	3.3	57
248	IPM Machine Drive Design and Tests for an Integrated Starterâ€"Alternator Application. IEEE Transactions on Industry Applications, 2010, 46, 993-1001.	3.3	43
249	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.	3.3	65
250	An Overview of Rotor Losses Determination in Three-Phase Fractional-Slot PM Machines. IEEE Transactions on Industry Applications, 2010, 46, 2338-2345.	3.3	99
251	Analysis and Tests of a Dual Three-Phase 12-Slot 10-Pole Permanent-Magnet Motor. IEEE Transactions on Industry Applications, 2010, 46, 2355-2362.	3.3	133
252	Rotor losses in fractional-slot three-phase and five-phase PM machines. , 2010, , .		20

#	Article	IF	Citations
253	Impact of winding arrangement in dual 3-phase induction motor for fault tolerant applications. , 2010, , .		22
254	Average and oscillating torque determination in fractional-slot PM motors. , 2010, , .		6
255	A ringed-pole SPM motor for sensorless drives - electromagnetic analysis, prototyping and tests. , 2010, , .		13
256	IM rotor parameters analysis with an intentionally created saliency. , 2010, , .		6
257	Analysis and tests of a dual three-phase 12-slot 10-pole permanent magnet motor. , 2009, , .		91
258	A finite-element procedure to compute variable speed induction machine performance. , 2009, , .		4
259	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.	3.3	393
260	Analysis of asynchronous machines for direct drive wind power generation. , 2009, , .		7
261	Impact of MMF Space Harmonic on Rotor Losses in Fractional-Slot Permanent-Magnet Machines. IEEE Transactions on Energy Conversion, 2009, 24, 323-328.	3.7	152
262	Predicted and measured errors in estimating rotor position by signal injection for salient-pole PM synchronous motors. , 2009, , .		33
263	Configurations of fractional-slot IPM Motors with dual three-phase winding. , 2009, , .		12
264	Space vector harmonic analysis of a five-phase PM motor including asymmetries. , 2009, , .		0
265	Rotor flux-barrier geometry design to reduce iron losses in synchronous IPM motors under FW operations. , 2009, , .		7
266	Ringed-pole permanent magnet synchronous motor for position sensorless drives. , 2009, , .		17
267	Sensorless-Oriented Design of PM Motors. IEEE Transactions on Industry Applications, 2009, 45, 1249-1257.	3.3	53
268	Design and Control of an Axial-Flux Machine for a Wide Flux-Weakening Operation Region. IEEE Transactions on Industry Applications, 2009, 45, 1258-1266.	3.3	51
269	Torque Harmonic Compensation in a Synchronous Reluctance Motor. IEEE Transactions on Energy Conversion, 2008, 23, 466-473.	3.7	131
270	The steering effect PM motor drives for automotive systems. IEEE Industry Applications Magazine, 2008, 14, 40-48.	0.3	15

#	ARTICLE	IF	CITATIONS
271	PM motors for hybrid electric vehicles. , 2008, , .		14
272	A Very Rapid Prediction of IM Performance Combining Analytical and Finite-Element Analysis. IEEE Transactions on Industry Applications, 2008, 44, 1505-1512.	3.3	56
273	Magnetic Loading of Fractional-Slot Three-Phase PM Motors With Nonoverlapped Coils. IEEE Transactions on Industry Applications, 2008, 44, 1513-1521.	3.3	49
274	Advantages of Inset PM Machines for Zero-Speed Sensorless Position Detection. IEEE Transactions on Industry Applications, 2008, 44, 1190-1198.	3.3	70
275	A Coupled Thermalâ€“Electromagnetic Analysis for a Rapid and Accurate Prediction of IM Performance. IEEE Transactions on Industrial Electronics, 2008, 55, 3575-3582.	5.2	108
276	Impact of Stator Winding of a Five-Phase Permanent-Magnet Motor on Postfault Operations. IEEE Transactions on Industrial Electronics, 2008, 55, 1978-1987.	5.2	106
277	Experimental tests on a 12-slot 8-pole Integrated Starter-Alternator. , 2008, , .		3
278	Iron Losses Reduction in Synchronous Motors with Anisotropic Rotor. , 2008, , .		16
279	Post-fault operations of five-phase motor using a full-bridge inverter. Power Electronics Specialist Conference (PESC), IEEE, 2008, , .	0.0	28
280	Thermal assisted finite element analysis of electrical machines. , 2008, , .		6
281	Finite element modeling of induction motor for variable speed drives. , 2008, , .		2
282	Field oriented control of induction motor: A direct analysis using finite element. , 2008, , .		12
283	Impact of Rotor Losses in a 12-Slot 10-Pole Axial Flux PM Machine. , 2008, , .		23
284	Hybrid electric propulsion system using submersed SPM machine. , 2008, , .		8
285	IPM Machine Drive Design and Tests for an Integrated Starter-Alternator Application. , 2008, , .		12
286	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
287	Sensorless-Oriented-Design of PM Motors. Conference Record - IAS Annual Meeting (IEEE Industry) Tj ETQq1 1 0.784314 rgBT /Overlo	0.0	3
288	Lamination Design of a Set of Induction Motors for Elevator Systems. , 2007, , .		3

#	Article	IF	Citations
289	A rapid prediction of IM performance using a combined analytical and finite element analysis. , 2007, , .		4
290	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
291	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
292	Sensorless-Oriented-Design of PM Motors. Conference Record - IAS Annual Meeting (IEEE Industry) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	0.0	1
293	Influence of Rotor Geometry of an IPM Motor on Sensorless Control Feasibility. IEEE Transactions on Industry Applications, 2007, 43, 87-96.	3.3	166
294	Strategies for the Fault-Tolerant Current Control of a Five-Phase Permanent-Magnet Motor. IEEE Transactions on Industry Applications, 2007, 43, 960-970.	3.3	245
295	Comparison of PM Motor Structures and Sensorless Control Techniques for Zero-Speed Rotor Position Detection. IEEE Transactions on Power Electronics, 2007, 22, 2466-2475.	5.4	177
296	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
297	Design Criteria for High-Efficiency SPM Synchronous Motors. IEEE Transactions on Energy Conversion, 2006, 21, 396-404.	3.7	97
298	Design considerations for fractional-slot winding configurations of synchronous machines. IEEE Transactions on Industry Applications, 2006, 42, 997-1006.	3.3	367
299	High speed drive using a slotless PM motor. IEEE Transactions on Power Electronics, 2006, 21, 1083-1090.	5.4	93
300	Rotor flux-barrier design for torque ripple reduction in synchronous reluctance motors. , 2006, , .		54
301	Magnetic loading of fractional-slot three phase PM motors with non-overlapped coils. , 2006, , .		14
302	Use of the star of slots in designing fractional-slot single-layer synchronous motors. IET Electric Power Applications, 2006, 153, 459.	1.4	209
303	Design of a Fault-Tolerant IPM Motor for Electric Power Steering. IEEE Transactions on Vehicular Technology, 2006, 55, 1102-1111.	3.9	106
304	Advantages of inset PM machines for zero-speed sensorless position detection. , 2006, , .		45
305	Design considerations on fractional-slot fault-tolerant synchronous motors. , 2005, , .		77
306	Analysis and Design of a PM Brushless Motor for High-Speed Operations. IEEE Transactions on Energy Conversion, 2005, 20, 629-637.	3.7	85

#	Article	IF	Citations
307	New Perspectives for Electrical Motors in Adjustable Speed Drives. EPE Journal (European Power) Tj ETQq1 1 0.784314 rgBT /Overlock	0.7	4
308	Optimum Current Waveform for Minimizing Torque Ripple of SPM Motors. Electric Power Components and Systems, 2004, 32, 435-451.	1.0	2
309	Potentials and Limits of High-Speed PM Motors. IEEE Transactions on Industry Applications, 2004, 40, 1570-1578.	3.3	264
310	Innovative remedial strategies for inverter faults in IPM synchronous motor drives. IEEE Transactions on Energy Conversion, 2003, 18, 306-314.	3.7	124
311	Tubular linear permanent magnet motors: an overall comparison. IEEE Transactions on Industry Applications, 2003, 39, 466-475.	3.3	186
312	Thermal analysis of a run-capacitor single-phase induction motor. IEEE Transactions on Industry Applications, 2003, 39, 457-465.	3.3	14
313	Design techniques for reducing the cogging torque in surface-mounted PM motors. IEEE Transactions on Industry Applications, 2002, 38, 1259-1265.	3.3	648
314	Axially laminated reluctance motor: analytical and finite-element methods for magnetic analysis. IEEE Transactions on Magnetics, 2002, 38, 239-245.	1.2	22
315	High-performance PM synchronous motor drive for an electrical scooter. IEEE Transactions on Industry Applications, 2001, 37, 1348-1355.	3.3	89
316	Analytical field computation of a tubular permanent-magnet linear motor. IEEE Transactions on Magnetics, 2000, 36, 3798-3801.	1.2	66
317	Salient-rotor PM synchronous motors for an extended flux-weakening operation range. IEEE Transactions on Industry Applications, 2000, 36, 1118-1125.	3.3	92
318	Performance analysis of an IPM motor with segmented rotor for flux-weakening applications. , 1999, , .		22
319	Parameters and volt-ampere ratings of a synchronous motor drive for flux-weakening applications. IEEE Transactions on Power Electronics, 1997, 12, 895-903.	5.4	93
320	Analysis and design of a brushless motor for high speed operation. , 0, , .		11
321	Design procedure of a vector controlled induction motor for flux-weakening operations. , 0, , .		11
322	Magnetic models of saturated interior permanent magnet motors based on finite element analysis. , 0, , .		153
323	Unified approach to the analysis and design of an AC motor drive for flux-weakening operations. , 0, , .		19
324	Design techniques for reducing the cogging torque in surface-mounted PM motors. , 0, , .		22

#	Article	IF	Citations
325	Design criteria of a tubular linear IPM motor. , 0, , .		32
326	Tubular linear permanent magnet motors: an overall comparison. , 0, , .		9
327	Time optimal current control for PMSM drives. , 0, , .		15
328	Interior PM synchronous motor for high performance applications. , 0, , .		35
329	Thermal analysis of a run-capacitor single-phase induction motor. , 0, , .		3
330	Potentials and limits of high speed PM motors. , 0, , .		15
331	Design criteria of high efficiency SPM synchronous motors. , 0, , .		13
332	High speed drive using a slotless PM motor. , 0, , .		6
333	Back EMF improvement and force ripple reduction in PM linear motor drives. , 0, , .		8
334	PM Motors for Very High Dynamic Applications. , 0, , .		8
335	Design of a Fault-tolerant IPM Motor for Electric Power Steering. , 0, , .		31
336	PM motor drives for steer-by-wire applications. , 0, , .		10
337	Influence of rotor geometry of an interior PM motor on sensorless control feasibility. , 0, , .		47
338	Faultâ€“ Tolerant PM Motors in Automotive Applications. , 0, , .		26
339	Design Hints of an IPM Synchronous Motor for an Effective Position Sensorless Control. , 0, , .		28
340	Design and Tests of a Fault-Tolerant Five-phase Permanent Magnet Motor. , 0, , .		33
341	Comparison of PM motor structures and sensorless control techniques for zero-speed rotor position detection. , 0, , .		24
342	Torque Harmonic Compensation in a Synchronous Reluctance Motor. , 0, , .		5