Qian Chen

List of Publications by Year in Descending Order

75 papers	1,187 citations	20 h-index	31 g-index
84 ext. papers	1,536 ext. citations	4.7 avg, IF	5.16 L-index

#	Paper	IF	Citations
75	A New Fault-Tolerant Rotor Permanent Magnet Flux-Switching Motor. *IEEE Transactions on Transportation Electrification*, **2022**, 1-1	7.6	1
74	Remedy Strategy for Five-Phase FTPMMs Under Single-Phase Short-Circuit Fault by Injecting Harmonic Currents from Third Space. *IEEE Transactions on Power Electronics*, **2022**, 1-1	7.2	1
73	Active Disturbance Rejection Control of a Magnetic Screw Motor for High Tracking Performance. *IEEE Transactions on Power Electronics*, **2022**, 1-1	7.2	0
72	Induction Motor Broken Rotor Bar Fault Diagnosis Based on Third-Order Energy Operator Demodulated Current Signal. *IEEE Transactions on Energy Conversion*, **2021**, 1-1	5.4	2
71	Position Estimation Error Compensation for Sensorless Control of SPMSM Based on Space Vector Signal Injection. *IEEE Transactions on Energy Conversion*, **2021**, 1-1	5.4	
70	Online Diagnosis of Slight Interturn Short-Circuit Fault for a Low-Speed Permanent Magnet Synchronous Motor. *IEEE Transactions on Transportation Electrification*, **2021**, 7, 104-113	7.6	5
69	Analysis and Application of Two-Layer Unconventional Windings for PM-Assisted Synchronous Reluctance Motors. *Energies*, **2021**, 14, 3447	3.1	0
68	Torque Calculation of Stator Modular PMa-SynRM With Asymmetric Design for Electric Vehicles. *IEEE Transactions on Transportation Electrification*, **2021**, 7, 202-213	7.6	7
67	Torque Performance Improvement of Consequent-Pole PM Motors With Hybrid Rotor Configuration. *IEEE Transactions on Transportation Electrification*, **2021**, 7, 1561-1572	7.6	2
66	Vibration Investigation of Spoke-Type PM Machine With Asymmetric Rotor Considering Modulation Effect of Stator Teeth. *IEEE Transactions on Industrial Electronics*, **2021**, 68, 9092-9103	8.9	5
65	Design and Optimization of a Fault Tolerant Modular Permanent Magnet Assisted Synchronous Reluctance Motor With Torque Ripple Minimization. *IEEE Transactions on Industrial Electronics*, **2021**, 68, 8519-8530	8.9	6
64	Multi-Vectors Model Predictive Control with Voltage Error Tracking for Five-Phase PMSM Short-Circuit Fault-Tolerant Operation. *IEEE Transactions on Transportation Electrification*, **2021**, 1-1	7.6	4
63	Performance Comparison of Fault-Tolerant Control for Triple Redundant 3□-Phase Phase Motors Driven by Mono-Inverter. *IEEE Transactions on Transportation Electrification*, **2021**, 1-1	7.6	1
62	Adjustable Model Predictive Control for IPMSM Drives Based on Online Stator Inductance Identification. *IEEE Transactions on Industrial Electronics*, **2021**, 1-1	8.9	4
61	MTPA Control of Sensorless IPMSM Drive System Based on Virtual and Actual High-Frequency Signal Injection. *IEEE Transactions on Transportation Electrification*, **2021**, 7, 1516-1526	7.6	2
60	Multi-objective optimization design of inset-surface permanent magnet machine considering deterministic and robust performances. *Chinese Journal of Electrical Engineering*, **2021**, 7, 73-87	4	2
59	Fault-Tolerant Control of a Triple Redundant PMA-SynRM Driven Under Single-Phase Open-Circuit by Mono-Inverter. *IEEE Transactions on Power Electronics*, **2021**, 36, 11593-11605	7.2	8

58	Robust Predictive Current Control for Fault-Tolerant Operation of Five-Phase PM Motors Based on Online Stator Inductance Identification. *IEEE Transactions on Power Electronics*, **2021**, 36, 13162-13175	7.2	7
57	Sensorless Control for Five-Phase IPMSM Drives by Injecting HF Square-Wave Voltage Signal into Third Harmonic Space. *IEEE Access*, **2020**, 8, 69712-69721	3.5	9
56	Design and Analysis of a New Equivalent Magnetic Network Model for IPM Machines. *IEEE Transactions on Magnetics*, **2020**, 56, 1-12	2	10
55	Fast calculation method of optimal flux-barrier-end position for torque ripple minimisation in SynRMs with and without PMs. *IET Electric Power Applications*, **2020**, 14, 705-715	1.8	2
54	Reduction of Torque Ripple Caused by Slot Harmonics in FSCW Spoke-Type FPM Motors by Assisted Poles. *IEEE Transactions on Industrial Electronics*, **2020**, 67, 9613-9622	8.9	8
53	Multiobjective Deterministic and Robust Optimization Design of a New Spoke-Type Permanent Magnet Machine for the Improvement of Torque Performance. *IEEE Transactions on Industrial Electronics*, **2020**, 67, 10202-10212	8.9	15
52	Extension of Space-Vector-Signal-Injection-Based MTPA Control Into SVPWM Fault-Tolerant Operation for Five-Phase IPMSM. *IEEE Transactions on Industrial Electronics*, **2020**, 67, 7321-7333	8.9	25
51	Design of a New Fault-Tolerant Permanent Magnet Machine With Optimized Salient Ratio and Reluctance Torque Ratio. *IEEE Transactions on Industrial Electronics*, **2020**, 67, 6043-6054	8.9	7
50	Torque calculation of five-phase synchronous reluctance motors with shifted-asymmetrical-salient-poles under saturation condition. *CES Transactions on Electrical Machines and Systems*, **2020**, 4, 105-113	2.3	3
49	Principle of Torque Ripple Reduction in Synchronous Reluctance Motors With Shifted Asymmetrical Poles. *IEEE Journal of Emerging and Selected Topics in Power Electronics*, **2020**, 8, 2611-2622	5.6	11
48	Improvement of torque performances in consequent-pole PM machines with optimized six-layer winding and Halbach PMs array. *International Journal of Applied Electromagnetics and Mechanics*, **2020**, 62, 109-125	0.4	
47	FCS-MPC-Based Fault-Tolerant Control of Five-Phase IPMSM for MTPA Operation. *IEEE Transactions on Power Electronics*, **2020**, 35, 2882-2894	7.2	20
46	A Novel Spoke-Type PM Motor With Auxiliary Salient Poles for Low Torque Pulsation. *IEEE Transactions on Industrial Electronics*, **2020**, 67, 4762-4773	8.9	39
45	Sensorless Control of Linear Vernier Permanent-Magnet Motor Based on Improved Mover Flux Observer. *IEEE Transactions on Power Electronics*, **2020**, 35, 3869-3877	7.2	7
44	Torque Pulsation Reduction in Fractional-Slot Concentrated-Windings IPM Motors by Lowering Sub-Harmonics. *IEEE Transactions on Energy Conversion*, **2019**, 34, 2084-2095	5.4	11
43	Separation and comparison of average torque in five-phase IPM machines with distributed and fractional slot concentrated windings. *IET Electric Power Applications*, **2019**, 13, 285-293	1.8	5
42	A Novel Mesh-Based Equivalent Magnetic Network for Performance Analysis and Optimal Design of Permanent Magnet Machines. *IEEE Transactions on Energy Conversion*, **2019**, 34, 1337-1346	5.4	17
41	Principle of Torque-Angle Approaching in a Hybrid Rotor Permanent-Magnet Motor. *IEEE Transactions on Industrial Electronics*, **2019**, 66, 2580-2591	8.9	22

40	Mixed FTS/H∞ control of vehicle active suspensions with shock road disturbance. *Vehicle System Dynamics*, **2019**, 57, 841-854	2.8	10
39	Torque ripple improvement for ferrite-assisted synchronous reluctance motor by using asymmetric flux-barrier arrangement. *International Journal of Applied Electromagnetics and Mechanics*, **2019**, 60, 479-488	0.4	2
38	Power factor improvement of permanent-magnet linear vernier motor by using dual-inverter with hybrid discontinuous PWM. *IET Power Electronics*, **2019**, 12, 3438-3446	2.2	5
37	Torque Calculation of Five-Phase Interior Permanent Magnet Machine Using Improved Analytical Method. *IEEE Transactions on Energy Conversion*, **2019**, 34, 1023-1032	5.4	29
36	Modified Flux Linkage Observer for Sensorless Direct Thrust Force Control of Linear Vernier Permanent Magnet Motor. *IEEE Transactions on Power Electronics*, **2019**, 34, 7800-7811	7.2	16
35	Extension of Virtual-Signal-Injection-Based MTPA Control for Five-Phase IPMSM Into Fault-Tolerant Operation. *IEEE Transactions on Industrial Electronics*, **2019**, 66, 944-955	8.9	68
34	Fault-Tolerant Direct Thrust Force Control for a Dual Inverter Fed Open-End Winding Linear Vernier Permanent-Magnet Motor Using Improved SVPWM. *IEEE Transactions on Industrial Electronics*, **2018**, 65, 7458-7467	8.9	42
33	Torque Ripple Reduction in Five-Phase IPM Motors by Lowering Interactional MMF. *IEEE Transactions on Industrial Electronics*, **2018**, 65, 8520-8531	8.9	59
32	Analysis of a Hybrid Rotor Permanent Magnet Motor Based on Equivalent Magnetic Network. *IEEE Transactions on Magnetics*, **2018**, 54, 1-9	2	15
31	Fault-Tolerant Operation of a Novel Dual-Channel Switched Reluctance Motor Using Two 3-Phase Standard Inverters. *IEEE Transactions on Applied Superconductivity*, **2018**, 28, 1-5	1.8	18
30	Third Harmonic Current Injection in Fault-Tolerant Five-Phase Permanent-Magnet Motor Drive. *IEEE Transactions on Power Electronics*, **2018**, 33, 6970-6979	7.2	47
29	Decoupling control of a five-phase fault-tolerant permanent magnet motor by radial basis function neural network inverse. *AIP Advances*, **2018**, 8, 056634	1.5	1
28	Modeling and analysis of spoke-type permanent magnet vernier machine based on equivalent magnetic network method. *Chinese Journal of Electrical Engineering*, **2018**, 4, 96-103	4	12
27	Sensorless Control of a Linear Permanent-Magnet Motor Based on an Improved Disturbance Observer. *IEEE Transactions on Industrial Electronics*, **2018**, 65, 9291-9300	8.9	36
26	Improvement of Torque Capability of Permanent-Magnet Motor by Using Hybrid Rotor Configuration. *IEEE Transactions on Energy Conversion*, **2017**, 32, 953-962	5.4	35
25	Modular Reluctance Network Simulation of a Linear Permanent-Magnet Vernier Machine Using New Mesh Generation Methods. *IEEE Transactions on Industrial Electronics*, **2017**, 64, 5323-5332	8.9	27
24	Optimal Design of an Inset PM Motor With Assisted Barriers and Magnet Shifting for Improvement of Torque Characteristics. *IEEE Transactions on Magnetics*, **2017**, 53, 1-4	2	10
23	A Novel MTPA Control Strategy for IPMSM Drives by Space Vector Signal Injection. *IEEE Transactions on Industrial Electronics*, **2017**, 64, 9243-9252	8.9	40

22	Remedial phase-angle control of a five-phase fault-tolerant permanent-magnet vernier machine with short-circuit fault. *CES Transactions on Electrical Machines and Systems*, **2017**, 1, 83-88	2.3	9
21	A New Modeling Approach for Permanent Magnet Vernier Machine With Modulation Effect Consideration. *IEEE Transactions on Magnetics*, **2017**, 53, 1-12	2	18
20	Reduction of Torque Ripple in Inset Permanent Magnet Synchronous Motor by Magnets Shifting. *IEEE Transactions on Magnetics*, **2017**, 53, 1-13	2	35
19	Regulation of High-Efficiency Region in Permanent Magnet Machines According to a Given Driving Cycle. *IEEE Transactions on Magnetics*, **2017**, 53, 1-5	2	3
18	Design and Analysis of Five-Phase Fault-Tolerant Interior Permanent-Magnet Vernier Machine. *IEEE Transactions on Applied Superconductivity*, **2016**, 26, 1-5	1.8	9
17	Comparison of Two SVPWM Control Strategies of Five-Phase Fault-Tolerant Permanent-Magnet Motor. *IEEE Transactions on Power Electronics*, **2016**, 31, 6621-6630	7.2	69
16	Comparison of Excitation Topologies for Fully Stator-HTS Fault-Tolerant Machines. *IEEE Transactions on Applied Superconductivity*, **2016**, 26, 1-5	1.8	0
15	Electromagnetic Performance of Double-Stator Flux-Modulation Permanent-Magnet Motor. *IEEE Transactions on Applied Superconductivity*, **2016**, 26, 1-5	1.8	3
14	A Novel Double-Stator Tubular Vernier Permanent-Magnet Motor With High Thrust Density and Low Cogging Force. *IEEE Transactions on Magnetics*, **2015**, 51, 1-7	2	2
13	Design and Analysis of a New Fully Stator-HTS Motor. *IEEE Transactions on Applied Superconductivity*, **2014**, 24, 1-5	1.8	6
12	Design and Analysis of a New Fault-Tolerant Magnetic-Geared Permanent-Magnet Motor. *IEEE Transactions on Applied Superconductivity*, **2014**, 24, 1-5	1.8	2
11	Design and Comparison of Two Fault-Tolerant Interior-Permanent-Magnet Motors. *IEEE Transactions on Industrial Electronics*, **2014**, 61, 6615-6623	8.9	51
10	Design and experimental validation for direct-drive fault-tolerant permanent-magnet vernier machines. *Scientific World Journal, The*, **2014**, 2014, 241085	2.2	3
9	. *IEEE Transactions on Magnetics*, **2014**, 50, 1-10	2	22
8	Mitigation of acoustic noise by minimize torque and radial force fluctuation in fault tolerant permanent magnet machines **2014**,		6
7	Cost Reduction of a New Fault-Tolerant Halbach Permanent Magnet Machine Using Ferrite Magnet. *IEEE Transactions on Magnetics*, **2014**, 50, 1-4	2	8
6	Comparison of five topologies rotor permanent magnet motors with improved fault-tolerance **2013**,		4
5	Nonlinear Adaptive Lumped Parameter Magnetic Circuit Analysis for Spoke-Type Fault-Tolerant Permanent-Magnet Motors. *IEEE Transactions on Magnetics*, **2013**, 49, 5150-5157	2	36

4	Design of a spoke-type permanent-magnet motor with optimal winding configuration for electric vehicle applications. *Journal of Applied Physics*, **2012**, 111, 07E710	2.5	9
3	Design and analysis of new fault-tolerant permanent magnet motors for four-wheel-driving electric vehicles. *Journal of Applied Physics*, **2012**, 111, 07E713	2.5	13
2	Design and Analysis of a New Fault-Tolerant Permanent-Magnet Vernier Machine for Electric Vehicles. *IEEE Transactions on Magnetics*, **2012**, 48, 4176-4179	2	84
1	A New Fault-Tolerant Permanent-Magnet Machine for Electric Vehicle Applications. *IEEE Transactions on Magnetics*, **2011**, 47, 4183-4186	2	53