Ping Zheng

List of Publications by Year in Descending Order

118 papers	1,101 citations	18 h-index	27 g-index
173 ext. papers	1,413 ext. citations	3.3 avg, IF	4.67 L-index

#	Paper	IF	Citations
118	A Novel High Torque Density Dual Three-Phase PMSM with Low Space Harmonic Content. *IEEE Transactions on Magnetics*, **2022**, 1-1	2	0
117	Design, modelling and analysis of a hybrid-magnet variable-flux PMSM with variable series-parallel magnetic circuit. *Energy Reports*, **2022**, 8, 1200-1209	4.6	
116	Force Modeling and Analysis of a Tube Flux-Switching Transverse-Flux Permanent Magnet Linear Motor. *IEEE Transactions on Industry Applications*, **2022**, 1-1	4.3	
115	Five-Phase Hybrid Single/Double Layer Fractional Slot Winding PMSM for Torque Improvement under Third Harmonic Current Injection Condition. *IEEE Transactions on Magnetics*, **2022**, 1-1	2	
114	Active Damping Current Control for Current-Source Inverter-Based PMSM Drives. *IEEE Transactions on Industrial Electronics*, **2022**, 1-1	8.9	
113	Trajectory-Regulation-Based Segmented Control for Dead Center Positions Tracking of Free-Piston Linear Generator. *IEEE Transactions on Industrial Electronics*, **2022**, 1-1	8.9	0
112	Design and Analysis of a Novel Tubular High-PM-Utilization Transverse-Flux Linear Machine. *IEEE Transactions on Magnetics*, **2021**, 1-1	2	
111	Compensation Strategy Based on Rotating Rhombus Method for Five-Phase PMSM With One-Phase Terminal Short-Circuit Fault. *IEEE Transactions on Magnetics*, **2021**, 57, 1-5	2	2
110	A High-Torque-Density Variable-Flux Memory Machine Utilizing Novel (Ce, Nd)-Fe-B Magnets. *IEEE Transactions on Magnetics*, **2021**, 57, 1-6	2	1
109	Investigation of the Power Factor of Magnetic-Field Modulated Brushless Double-Rotor Machine. *IEEE Transactions on Power Electronics*, **2021**, 36, 423-432	7.2	7
108	Analysis of Novel Hybrid-PM Variable-Flux PMSMs With Series–Parallel Magnetic Circuits. *IEEE Transactions on Magnetics*, **2021**, 57, 1-6	2	8
107	Investigation of an Integrated Magnetic-Field-Modulated Brushless Double-Rotor Machine With an Improved PM Rotor. *IEEE Transactions on Magnetics*, **2021**, 57, 1-6	2	2
106	Investigation of a Dual-Winding Dual-Flux-Concentrated Magnetic-Field Modulated Brushless Compound-Structure Machine. *IEEE Transactions on Magnetics*, **2021**, 1-1	2	1
105	Study of a High-Efficiency Series-Parallel-Connected Hybrid-PM Variable-Flux Permanent Magnet Synchronous Machine. *IEEE Transactions on Magnetics*, **2021**, 1-1	2	0
104	. *IEEE Transactions on Industrial Electronics*, **2021**, 1-1	8.9	
103	Analysis and Optimization of a V-Shape Combined Pole Interior Permanent-Magnet Synchronous Machine With Temperature Rise and Demagnetization Considered. *IEEE Access*, **2021**, 9, 64761-64775	3.5	1
102	Design Methodologies for Variable-Flux Machines with Extra Torque-Speed Range. *IEEE Transactions on Magnetics*, **2021**, 1-1	2	

101	Analytical Modeling of an Axial Flux Magnetic-Geared Double-Rotor Machine with Interior-Modulating-Rotor. *IEEE Transactions on Magnetics*, **2021**, 1-1	2	1
100	Comparative Investigations of Inverter Short-Circuit Fault and Winding Terminal Short-Circuit Fault in Open-End Winding Five-Phase PM Machine System. *IEEE Transactions on Magnetics*, **2021**, 57, 1-5	2	1
99	Short-Circuit Fault-Tolerant Control without Constraint on D-Axis Armature Magnetomotive Force for Five-Phase PMSM. *IEEE Transactions on Industrial Electronics*, **2021**, 1-1	8.9	4
98	Third Harmonic Current Injection in Different Operating Stages of Five-Phase PMSM With Hybrid Single/Double Layer Fractional-Slot Concentrated Winding. *IEEE Access*, **2021**, 9, 15670-15685	3.5	9
97	. *IEEE Access*, **2021**, 9, 121445-121455	3.5	
96	Diagnosis and Remediation of Single-Turn Short Circuit in a Multiphase FSCW PM Machine Based on T-type Equivalent Circuit. *IEEE Transactions on Industry Applications*, **2020**, 56, 158-169	4.3	8
95	Analysis of a Novel Hybrid-PM Variable-Flux Machine Using New Magnet Material CeFeB. *IEEE Transactions on Magnetics*, **2019**, 55, 1-7	2	8
94	Tubular unified magnetic-field flux-switching PMLM for free-piston energy converter. *IET Electric Power Applications*, **2019**, 13, 625-634	1.8	5
93	Effects of static eccentricity on the no-load back electromotive force of external rotor permanent magnet brushless DC motor used as in-wheel motor. *IET Electric Power Applications*, **2019**, 13, 604-613	1.8	6
92	Influence of static eccentricity on unbalanced magnetic force of external rotor permanent magnet brushless direct current motor used as In-wheel motor. *IET Electric Power Applications*, **2019**, 13, 538-550	1.8	10
91	Analysis of Magnetic Properties of AlNiCo and Magnetization State Estimation in Variable-Flux PMSMs. *IEEE Transactions on Magnetics*, **2019**, 55, 1-6	2	6
90	Design and Analysis of a Magnetic-Field Modulated Brushless Double-Rotor Machine—Part I: Pole Pair Combination of Stator, PM Rotor and Magnetic Blocks. *IEEE Transactions on Industrial Electronics*, **2019**, 66, 2540-2549	8.9	16
89	Characteristic Analysis and Functional Validation of a Brushless Flux-Modulated Double-Rotor Machine for HEVs. *IEEE Transactions on Industrial Electronics*, **2019**, 66, 663-673	8.9	8
88	Research on a Transverse-Flux Brushless Double-Rotor Machine for Hybrid Electric Vehicles. *IEEE Transactions on Industrial Electronics*, **2019**, 66, 1032-1043	8.9	19
87	Performance Analysis of an Axial Magnetic-Field-Modulated Brushless Double-Rotor Machine for Hybrid Electric Vehicles. *IEEE Transactions on Industrial Electronics*, **2019**, 66, 806-817	8.9	30
86	Design and Analysis of a Magnetic-Field Modulated Brushless Double-Rotor Machine—Part II: Winding Configuration. *IEEE Transactions on Industrial Electronics*, **2019**, 66, 2550-2560	8.9	8
85	Multiphase Modular Fault-Tolerant Permanent-Magnet Machine With Hybrid Single/Double-Layer Fractional-Slot Concentrated Winding. *IEEE Transactions on Magnetics*, **2019**, 55, 1-6	2	10
84	A Novel Variable-Flux PMSM with Parallel Hybrid Magnets Capable of Operating in a Wide Speed Range **2019**,		2

83	Comparative study of hybrid-PM variable-flux machines with different series PM configurations. *AIP Advances*, **2019**, 9, 125241	1.5	2
82	Comparison of Vernier Machines with Different Rotor PM Configurations **2019**,		1
81	A Tubular Staggered-Teeth Transverse-Flux PMLM With Circumferentially Distributed Three-Phase Windings. *IEEE Transactions on Industrial Electronics*, **2019**, 66, 4837-4848	8.9	12
80	Open-Circuit Fault-Tolerant Control of Five-Phase PM Machine Based on Reconfiguring Maximum Round Magnetomotive Force. *IEEE Transactions on Industrial Electronics*, **2019**, 66, 48-59	8.9	51
79	Implementation of Postfault Decoupling Vector Control and Mitigation of Current Ripple for Five-Phase Fault-Tolerant PM Machine Under Single-Phase Open-Circuit Fault. *IEEE Transactions on Power Electronics*, **2018**, 33, 8623-8636	7.2	36
78	A Novel Variable-Flux Permanent-Magnet Synchronous Machine With Quasi-Series Magnet Configuration and Passive Flux Barrier. *IEEE Transactions on Magnetics*, **2018**, 54, 1-5	2	10
77	Thermal analysis and experimental verification of a staggered-teeth transverse-flux permanent-magnet linear machine. *IET Electric Power Applications*, **2018**, 12, 1048-1057	1.8	10
76	Optimization and Mechanical Strength Analysis of Less-Rare-Earth Interior Permanent-Magnet Synchronous Machines Used for Electric Vehicles **2018**,		1
75	Short-Circuit Fault Detection for a Five-Phase 30-Slot/32-Pole Permanent-Magnet Synchronous Machine **2018**,		1
74	Low-Loss Design and Analysis of Magnetic-Field Modulated Brushless Double-Rotor Machine. *IEEE Transactions on Magnetics*, **2018**, 54, 1-5	2	4
73	Investigation of a less rare-earth permanent-magnet machine with the consequent pole rotor. *AIP Advances*, **2018**, 8, 056626	1.5	5
72	Demagnetization and Permanent-Magnet Minimization Analyses of Less-Rare-Earth Interior Permanent-Magnet Synchronous Machines Used for Electric Vehicles. *IEEE Transactions on Magnetics*, **2018**, 54, 1-5	2	11
71	A tubular hybrid Halbach/axially-magnetized permanent-magnet linear machine. *AIP Advances*, **2017**, 7, 056629	1.5	1
70	A single-phase axially-magnetized permanent-magnet oscillating machine for miniature aerospace power sources. *AIP Advances*, **2017**, 7, 056659	1.5	2
69	Analytical Modeling of Interturn Short Circuit for Multiphase Fault-Tolerant PM Machines With Fractional Slot Concentrated Windings. *IEEE Transactions on Industry Applications*, **2017**, 53, 1994-2006	4.3	21
68	An Easy-to-Implement Hysteresis Model Identification Method Based on Support Vector Regression. *IEEE Transactions on Magnetics*, **2017**, 53, 1-4	2	4
67	A Novel Sensorless Control Strategy for Brushless Direct Current Motor Based on the Estimation of Line Back Electro-Motive Force. *Energies*, **2017**, 10, 1384	3.1	7
66	Investigation of low space harmonic six-phase PMSM with FSCWS for electric vehicle applications **2017**,		2

65	Electromagnetic and mechanical analyses of less-rare-earth interior permanent-magnet synchronous machine used for electric vehicles **2017**,		2
64	Research on the vector control strategy of five-phase permanent-magnet synchronous machine based on third-harmonic current injection **2017**,		4
63	Research on system control and energy management strategy of flux-modulated compound-structure permanent magnet synchronous machine. *CES Transactions on Electrical Machines and Systems*, **2017**, 1, 100-108	2.3	2
62	Research on Control Strategy of Free-Piston Stirling Power Generating System. *Energies*, **2017**, 10, 1609	3.1	4
61	Investigation of the Magnetic Circuit and Performance of Less-Rare-Earth Interior Permanent-Magnet Synchronous Machines Used for Electric Vehicles. *Energies*, **2017**, 10, 2173	3.1	4
60	Influence of Third Harmonic Back EMF on Modeling and Remediation of Winding Short Circuit in a Multiphase PM Machine With FSCWs. *IEEE Transactions on Industrial Electronics*, **2016**, 63, 6031-6041	8.9	24
59	Investigation Into a Magnetic-Field-Modulated Brushless Double-Rotor Machine With the High-Strength and Low-Loss Modulating Ring Rotor. *IEEE Transactions on Magnetics*, **2016**, 52, 1-4	2	8
58	Analytical Investigation of the Magnetic-Field Distribution in an Axial Magnetic-Field-Modulated Brushless Double-Rotor Machine. *Energies*, **2016**, 9, 589	3.1	6
57	The simulation design of parameters optimization on tubular linear motor with optimal output force **2016**,		1
56	Analysis and Optimization of a Novel Tubular Staggered-Tooth Transverse-Flux PM Linear Machine. *IEEE Transactions on Magnetics*, **2015**, 51, 1-4	2	20
55	Analysis and Experimental Evaluation of Harmonic Leakage Inductance for Polyphase PM Machines Having Close Slot and Pole Combinations. *IEEE Transactions on Magnetics*, **2015**, 51, 1-4	2	5
54	Six-phase fault-tolerant permanent magnet motor drives with reduced switch counts: Topology comparisons and hardware demonstration **2015**,		1
53	Investigation of a tubular dual-stator flux-switching permanent-magnet linear generator for free-piston energy converter. *Journal of Applied Physics*, **2015**, 117, 17B519	2.5	3
52	Research on a Tubular Yokeless Linear PM Machine. *IEEE Transactions on Magnetics*, **2015**, 51, 1-4	2	7
51	Thermal Analysis of a Novel Cylindrical Transverse-Flux Permanent-Magnet Linear Machine. *Energies*, **2015**, 8, 7874-7896	3.1	4
50	Investigation of a Magnetic-Field Modulated Brushless Double-Rotor Machine With the Same Polarity of PM Rotor. *IEEE Transactions on Magnetics*, **2015**, 51, 1-4	2	3
49	A New Magnetic-Field-Modulated Brushless Double-Rotor Machine. *IEEE Transactions on Magnetics*, **2015**, 51, 1-4	2	2
48	Characteristic Analysis and Verification of the Magnetic-Field-Modulated Brushless Double-Rotor Machine. *IEEE Transactions on Industrial Electronics*, **2015**, 62, 4023-4033	8.9	84

47	A novel single-phase flux-switching permanent magnet linear generator used for free-piston Stirling engine. *Journal of Applied Physics*, **2014**, 115, 17E711	2.5	11
46	Design and transient behavior of magnetic gears. *Journal of Applied Physics*, **2014**, 115, 17E706	2.5	6
45	A Brushless Claw-Pole Double-Rotor Machine for Power-Split Hybrid Electric Vehicles. *IEEE Transactions on Industrial Electronics*, **2014**, 61, 4295-4305	8.9	25
44	Investigation of a five-phase 20-slot/18-pole PMSM for electric vehicles **2014**,		3
43	Research on control strategy of free-piston stirling-engine linear-generator system **2014**,		3
42	Research on dual-plane vector control of fivephase fault-tolerant permanent magnet machine **2014** ,		3
41	Research on electromagnetic performance of an axial magnetic-field-modulated brushless double-rotor machine for hybrid electric vehicles **2014**,		8
40	An axial magnetic-field-modulated brushless double-rotor machine for hybrid electric vehicles **2014** ,		3
39	Research on a four-phase fault-tolerant PMSM used for EVs **2014**,		1
38	Design and optimization of five-phase fault-tolerant in-wheel permanent machine with low mutual-inductance **2014**,		2
37	Design and analytical inductance calculations of five-phase fault-tolerant permanent-magnet Machine **2014**,		2
36	Magnetic circuit and torque analysis of a brushless transverse flux dual-rotor machine used for HEVs **2014**,		3
35	Investigation of Magnetically Isolated Multiphase Modular Permanent-Magnet Synchronous Machinery Series for Wheel-Driving Electric Vehicles. *IEEE Transactions on Magnetics*, **2014**, 50, 1-4	2	16
34	Design and Experimental Verification of a Short-Circuit Proof Six-Phase Permanent Magnet Machine for Safety Critical Applications. *IEEE Transactions on Magnetics*, **2014**, 50, 1-4	2	15
33	Investigation of a Novel Radial Magnetic-Field-Modulated Brushless Double-Rotor Machine Used for HEVs. *IEEE Transactions on Magnetics*, **2013**, 49, 1231-1241	2	54
32	Experimental Study of Compound-Structure Permanent-Magnet Synchronous Machine Used for HEVs. *IEEE Transactions on Magnetics*, **2013**, 49, 807-810	2	6
31	Investigation of a Novel 24-Slot/14-Pole Six-Phase Fault-Tolerant Modular Permanent-Magnet In-Wheel Motor for Electric Vehicles. *Energies*, **2013**, 6, 4980-5002	3.1	43
30	Analysis and Design of a Transverse-Flux Dual Rotor Machine for Power-Split Hybrid Electric Vehicle Applications. *Energies*, **2013**, 6, 6548-6568	3.1	17

29	Analysis and Experiment of a Novel Brushless Double Rotor Machine for Power-Split Hybrid Electrical Vehicle Applications. *Energies*, **2013**, 6, 3209-3223	3.1	2
28	Research on an Axial Magnetic-Field-Modulated Brushless Double Rotor Machine. *Energies*, **2013**, 6, 4799-4829	3.1	20
27	The electromagnetic propeller based on a five-phase fault-tolerant permanent-magnet machine **2012**,		3
26	Electromagnetic Design and Control Strategy of an Axially Magnetized Permanent-Magnet Linear Alternator for Free-Piston Stirling Engines. *IEEE Transactions on Industry Applications*, **2012**, 48, 2230-2239	2.3	34
25	Modeling and Control of a Flux-Modulated Compound-Structure Permanent-Magnet Synchronous Machine for Hybrid Electric Vehicles. *Energies*, **2012**, 5, 45-57	3.1	7
24	Performance Analysis and Simulation of a Novel Brushless Double Rotor Machine for Power-Split HEV Applications. *Energies*, **2012**, 5, 119-137	3.1	11
23	Magnetic Decoupling Design and Experimental Validation of a Radial-Radial Flux Compound-Structure Permanent-Magnet Synchronous Machine for HEVs. *Energies*, **2012**, 5, 4027-4039	3.1	5
22	Field weakening capability investigation of an axial flux permanent-magnet synchronous machine with radially sliding permanent magnets used for electric vehicles. *Journal of Applied Physics*, **2012**, 111, 07A719	2.5	6
21	Research on electromagnetic performance of a novel radial magnetic-field-modulated brushless double-rotor machine **2011**,		7
20	Research on the Magnetic Characteristic of a Novel Transverse-Flux PM Linear Machine Used for Free-Piston Energy Converter. *IEEE Transactions on Magnetics*, **2011**, 47, 1082-1085	2	23
19	Optimization on thrust ripple of an axial-flux permanent-magnet linear synchronous machine **2011**,		1
18	Torque ripple reduction in an interior permanent-magnet synchronous motor for servo applications **2011**,		2
17	Function validations of a radial-radial flux compound-structure permanent-magnet synchronous machine for HEVs **2010**,		1
16	Design and Analysis of Compound-Structure Permanent-Magnet Synchronous Machine Used for Hybrid Electric Vehicles **2010**,		1
15	Comparison and evaluation of different compound-structure permanent-magnet synchronous machine used for HEVs **2010**,		3
14	Comprehensive research on compound-structure permanent-magnet synchronous machine system used for HEVs **2010**,		3
13	Magnetic Characteristics Investigation of an Axial-Axial Flux Compound-Structure PMSM Used for HEVs. *IEEE Transactions on Magnetics*, **2010**, 46, 2191-2194	2	45
12	Experimental Evaluation of a Radial-Radial-Flux Compound-Structure Permanent-Magnet Synchronous Machine Used for HEVs. *IEEE Transactions on Magnetics*, **2009**, 45, 645-649	2	14

11	Research on the Cooling System of a 4QT Prototype Machine Used for HEV. *IEEE Transactions on Energy Conversion*, **2008**, 23, 61-67	5.4	61
10	Experimental Evaluation of a Radial-Radial-Flux Compound-Structure Permanent-Magnet Synchronous Machine Used for HEVs **2008**,		5
9	Evaluation of performance and magnetic characteristics of a radial-radial flux compound-structure permanent-magnet synchronous machine used for hybrid electric vehicle. *Journal of Applied Physics* , **2008**, 103, 07F130	2.5	3
8	Research on the Control of a Radial-Radial Flux Compound-Structure Permanent-Magnet Synchronous Machine Used for HEVs **2008**,		3
7	Research on the Parameters and Performances of a 4QT Prototype Machine Used for HEV. *IEEE Transactions on Magnetics*, **2007**, 43, 443-446	2	22
6	Research on the High Power Density Electromagnetic Propeller. *IEEE Transactions on Magnetics*, **2007**, 43, 355-358	2	17
5	Research on a Tubular Longitudinal Flux PM Linear Generator Used for Free-Piston Energy Converter. *IEEE Transactions on Magnetics*, **2007**, 43, 447-449	2	21
4	Investigation of the winding current distribution in a 4-quadrant-transducer prototype machine. *IEEE Transactions on Magnetics*, **2005**, 41, 1972-1975	2	8
3	Research on the relation between the propulsive force and magnetic system of the coil launcher based on the mechanism of hybrid switched reluctance motor. *IEEE Transactions on Magnetics*, **2003** , 39, 116-119	2	
2	Widely developing electric launch technology in China. *IEEE Transactions on Magnetics*, **2003**, 39, 39-41	2	8
1	Pole optimization of brushless DC motor		3