Zixuan Xiang

List of Publications by Year in Descending Order

56 papers	1,008 citations	15 h-index	31 g-index
75 ext. papers	1,343 ext. citations	4.1 avg, IF	4.89 L-index

#	Paper	IF	Citations
56	Torque Ripple Suppression of a Permanent Magnet Vernier Motor from Perspective of Shifted Air-gap Permeance Distribution. *IEEE Transactions on Magnetics*, **2022**, 1-1	2	
55	Design and Optimization of Double-Stator Vernier Permanent Magnet Motor with Improved Torque Characteristics Based on Flux Modulation Theory. *IEEE Transactions on Magnetics*, **2022**, 1-1	2	
54	Research on Magnetic Coupling Characteristic of a Double Rotor Flux-Switching PM Machine from the Perspective of Air-Gap Harmonic Groups. *IEEE Transactions on Industrial Electronics*, **2022**, 1-1	8.9	9
53	A Robust Optimization Design Approach for Hybrid PM Machine Considering Asymmetric Uncertainties of PMs. *IEEE Transactions on Magnetics*, **2022**, 1-1	2	1
52	Broadening Design and Optimization of High Efficiency Region for a Dual-Mechanical-Port Flux-Switching Permanent Magnet Motor. *IEEE Transactions on Magnetics*, **2022**, 1-1	2	
51	Design and Analysis of a V-Shaped Permanent Magnet Vernier Motor for High Torque Density. *CES Transactions on Electrical Machines and Systems*, **2022**, 6, 20-28	2.3	2
50	Optimization Design of Power Factor for an In-Wheel Vernier PM Machine From the Perspective of Air-Gap Harmonic Modulation. *IEEE Transactions on Industrial Electronics*, **2021**, 68, 9265-9276	8.9	15
49	Multi-objective Optimization Design of Variable-Saliency-Ratio PM Motor Considering Driving Cycles. *IEEE Transactions on Industrial Electronics*, **2021**, 68, 6516-6526	8.9	23
48	Anti-Demagnetization Capability Research of a Less-Rare-Earth Permanent-Magnet Synchronous Motor Based on the Modulation Principle. *IEEE Transactions on Magnetics*, **2021**, 57, 1-6	2	1
47	Investigation on Torque Characteristic and PM Operation Point of Flux-Intensifying PM Motor Considering Low-Speed Operation. *IEEE Transactions on Magnetics*, **2021**, 57, 1-5	2	5
46	Multi-Objective-Layered Optimization of a Magnetic Planetary Gear for Hybrid Powertrain. *IEEE Journal of Emerging and Selected Topics in Power Electronics*, **2021**, 1-1	5.6	1
45	Research on Power Factor Characteristic for a Flux-Modulated Permanent Magnet Motor From Perspective of Magnetic Source Topologies Effect. *IEEE Transactions on Applied Superconductivity*, **2021**, 31, 1-6	1.8	0
44	Airgap-Harmonic-Based Multilevel Design and Optimization of a Double-Stator Flux-Modulated Permanent-Magnet Motor. *IEEE Transactions on Industrial Electronics*, **2021**, 68, 10534-10545	8.9	11
43	Research On Enhanced Harmonic Effect of a Dual-PM-Excited Flux-Modulated Motor. *IEEE Transactions on Applied Superconductivity*, **2021**, 31, 1-6	1.8	0
42	Investigation on Electromagnetic Torque of a Flux-Switching Permanent Magnet Motor from Perspective of Flux Density Harmonic Reduction Ratio. *IEEE Transactions on Magnetics*, **2021**, 1-1	2	
41	Torque Characteristics Investigation of a Flux-Controllable Permanent Magnet Motor Considering Different Flux-leakage Operation Conditions. *IEEE Transactions on Magnetics*, **2021**, 1-1	2	1
40	Multi-Objective Optimization Design of a Multi-Permanent-Magnet Motor Considering Magnet Characteristic Variation Effects. *IEEE Transactions on Industrial Electronics*, **2021**, 1-1	8.9	8

39	Robust Optimization Design for Permanent Magnet Machine Considering Magnet Material Uncertainties. *IEEE Transactions on Magnetics*, **2021**, 1-1	2	1
38	Suppression of Torque Ripple of a Flux-Switching Permanent Magnet Motor in Perspective of Flux-Modulation Principle. *IEEE Transactions on Transportation Electrification*, **2021**, 1-1	7.6	1
37	Robust-Oriented Optimization Design for Permanent Magnet Motors Considering Parameter Fluctuation. *IEEE Transactions on Energy Conversion*, **2020**, 35, 2066-2075	5.4	3
36	Design and Analysis of a Multi-Flux-Modulated Permanent Magnet Motor. *IEEE Transactions on Applied Superconductivity*, **2020**, 30, 1-5	1.8	2
35	ElectromagneticMechanical Coupling Optimization of an IPM Synchronous Machine with Multi Flux Barriers. *Energies*, **2020**, 13, 1819	3.1	3
34	Design and Optimization of a Flux-Modulated Permanent Magnet Motor Based on an Airgap-Harmonic-Orientated Design Methodology. *IEEE Transactions on Industrial Electronics*, **2020**, 67, 5337-5348	8.9	39
33	Design and Analysis of Double-Air-Gap Flux-Modulated Permanent Magnet Motor Considering Leading Working Harmonics. *IEEE Transactions on Magnetics*, **2019**, 55, 1-5	2	5
32	Multi-objective optimisation of a permanent magnet flux-switching motor by combined parameter sensitivities analysis with non-linear varying-network magnetic circuit method. *IET Electric Power Applications*, **2019**, 13, 24-30	1.8	5
31	Active Disturbance Rejection Controller for Speed Control of Electrical Drives Using Phase-Locking Loop Observer. *IEEE Transactions on Industrial Electronics*, **2019**, 66, 1748-1759	8.9	58
30	. *IEEE Transactions on Industrial Electronics*, **2019**, 66, 2613-2627	8.9	70
29	Systematic multi-level optimization design and dynamic control of less-rare-earth hybrid permanent magnet motor for all-climatic electric vehicles. *Applied Energy*, **2019**, 253, 113549	10.7	37
28	Design and Multi-Objective Stratified Optimization of a Less-Rare-Earth Hybrid Permanent Magnets Motor With High Torque Density and Low Cost. *IEEE Transactions on Energy Conversion*, **2019**, 34, 1178-1189	5.4	48
27	. *IEEE Transactions on Industrial Electronics*, **2018**, 65, 5353-5366	8.9	120
26	Investigation of Optimal Split Ratio in Brushless Dual-Rotor Flux-Switching Permanent Magnet Machine Considering Power Allocation. *IEEE Transactions on Magnetics*, **2018**, 54, 1-4	2	10
25	Multimode Optimization Research on a Multiport Magnetic Planetary Gear Permanent Magnet Machine for Hybrid Electric Vehicles. *IEEE Transactions on Industrial Electronics*, **2018**, 65, 9035-9046	8.9	50
24	Design and Analysis of a Hybrid Permanent Magnet Assisted Synchronous Reluctance Motor Considering Magnetic Saliency and PM Usage. *IEEE Transactions on Applied Superconductivity*, **2018**, 28, 1-6	1.8	22
23	Design and Analysis of an Interior Permanent Magnet Synchronous Machine With Multiflux-Barriers Based on Flux-Intensifying Effect. *IEEE Transactions on Applied Superconductivity*, **2018**, 28, 1-5	1.8	11
22	A V-Shaped PM Vernier Motor With Enhanced Flux-Modulated Effect and Low Torque Ripple. *IEEE Transactions on Magnetics*, **2018**, 54, 1-4	2	7

21	Dynamic demagnetisation investigation for less-rare-earth flux switching permanent magnet motors considering three-phase short-circuit fault. *IET Electric Power Applications*, **2018**, 12, 1176-1182	1.8	4
20	Comparative Design and Analysis of New Type of Flux-Intensifying Interior Permanent Magnet Motors With Different Q-Axis Rotor Flux Barriers. *IEEE Transactions on Energy Conversion*, **2018**, 33, 2260-2269	5.4	23
19	Characteristic analysis of a less-rare-earth hybrid PM-assisted synchronous reluctance motor for EVs application. *AIP Advances*, **2017**, 7, 056648	1.5	7
18	Design and Multicondition Comparison of Two Outer-Rotor Flux-Switching Permanent-Magnet Motors for In-Wheel Traction Applications. *IEEE Transactions on Industrial Electronics*, **2017**, 64, 6137-6148	8.9	72
17	Design and analysis of a new flux-intensifying permanent magnet brushless motor with multilayer flux barriers. *AIP Advances*, **2017**, 7, 056628	1.5	3
16	Demagnetization investigation of a partitioned rotor flux switching machine with hybrid permanent magnet. *AIP Advances*, **2017**, 7, 056636	1.5	2
15	Co-Reduction of Torque Ripple for Outer Rotor Flux-Switching PM Motor Using Systematic Multi-Level Design and Control Schemes. *IEEE Transactions on Industrial Electronics*, **2017**, 64, 1102-1112	8.9	85
14	Comprehensive multi-objective scalarisation optimisation of a permanent magnet machine with correlation parameters stratified method. *IET Electric Power Applications*, **2017**, 11, 72-79	1.8	11
13	Design and comparison of two non-rare-earth permanent magnet synchronous reluctance motors for EV applications **2017**,		3
12	Multilevel Design Optimization and Operation of a Brushless Double Mechanical Port Flux-Switching Permanent-Magnet Motor. *IEEE Transactions on Industrial Electronics*, **2016**, 63, 6042-6054	8.9	108
11	Multi-Objective Optimization of an Outer-Rotor V-Shaped Permanent Magnet Flux Switching Motor Based on Multi-Level Design Method. *IEEE Transactions on Magnetics*, **2016**, 52, 1-8	2	38
10	Electromagnetic Performance Analysis and Verification of a New Flux-Intensifying Permanent Magnet Brushless Motor With Two-Layer Segmented Permanent Magnets. *IEEE Transactions on Magnetics*, **2016**, 52, 1-4	2	20
9	Electromagnetic Performance Analysis of a New Stator-Partitioned Flux Memory Machine Capable of Online Flux Control. *IEEE Transactions on Magnetics*, **2016**, 52, 1-4	2	9
8	A New Partitioned-Rotor Flux-Switching Permanent Magnet Motor With High Torque Density and Improved Magnet Utilization. *IEEE Transactions on Applied Superconductivity*, **2016**, 26, 1-5	1.8	15
7	Performance Evaluation of a U-Shaped Less-Rare-Earth Hybrid Permanent Magnet Assisted Synchronous Reluctance Motor **2016**,		5
6	A Brushless Double Mechanical Port Permanent Magnet Motor for Plug-In HEVs. *IEEE Transactions on Magnetics*, **2015**, 51, 1-4	2	14
5	Design of a sandwiched flux switching permanent magnet machine with outer-rotor configuration **2014**,		2
4	Alternative stator for new brushless dual-rotor flux-switching permanent magnet motor for extended range electric vehicles **2014**,		4

List of Publications

3	Minimization the torque ripple of flux-switching permanent magnet motor based on iterative learning control **2014**,	3
2	The performance of a hybrid excitation flux switching motor with ferrite magnets for EVs **2014**,	4
1	Comparison of double-stator flux-switching permanent magnet machine and double-stator permanent magnet synchronous machine for electric vehicle applications **2014**,	5