Chengming Zhang

List of Publications by Year
in descending order

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58	719	516710 16	580821 25
papers	citations	h-index	g-index

58	58	58	759
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Comprehensive comparison between silicon carbide MOSFETs and silicon IGBTs based traction systems for electric vehicles. Applied Energy, 2017, 194, 626-634.	10.1	56
2	Temperature Calculation for Tubular Linear Motor by the Combination of Thermal Circuit and Temperature Field Method Considering the Linear Motion of Air Gap. IEEE Transactions on Industrial Electronics, 2014, 61, 3923-3931.	7.9	44
3	Research on Electromagnetic and Thermal Issue of High-Efficiency and High-Power-Density Outer-Rotor Motor. IEEE Transactions on Applied Superconductivity, 2016, 26, 1-5.	1.7	39
4	Analytical Model of Magnetic Field of a Permanent Magnet Synchronous Motor With a Trapezoidal Halbach Permanent Magnet Array. IEEE Transactions on Magnetics, 2019, 55, 1-5.	2.1	36
5	Electrical Machines for Automotive Electrically Assisted Turbocharging. IEEE/ASME Transactions on Mechatronics, 2018, 23, 2054-2065.	5.8	34
6	Sectional Combinations of the Modular Tubular Permanent Magnet Linear Motor and the Optimization Design. IEEE Transactions on Industrial Electronics, 2018, 65, 9658-9667.	7.9	33
7	Inner Loop Design for PMLSM Drives With Thrust Ripple Compensation and High-Performance Current Control. IEEE Transactions on Industrial Electronics, 2018, 65, 9905-9915.	7.9	33
8	Electromagnetic and Thrust Characteristics of Double-sided Permanent Magnet Linear Synchronous Motor Adopting Staggering Primaries Structure. IEEE Transactions on Industrial Electronics, 2019, 66, 4826-4836.	7.9	33
9	Analysis and Optimization of Thrust Characteristics of Tubular Linear Electromagnetic Launcher for Space-Use. IEEE Transactions on Magnetics, 2009, 45, 250-255.	2.1	32
10	Force Ripple Compensation and Robust Predictive Current Control of PMLSM Using Augmented Generalized Proportionalâ€“Integral Observer. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2021, 9, 302-315.	5.4	29
11	Design Principles of a Phase-Shift Modular Slotless Tubular Permanent Magnet Linear Synchronous Motor With Three Sectional Primaries and Analysis of Its Detent Force. IEEE Transactions on Industrial Electronics, 2018, 65, 9346-9355.	7.9	26
12	Robust Predictive Current Control With Variable-Gain Adaptive Disturbance Observer for PMLSM. IEEE Access, 2018, 6, 13158-13169.	4.2	26
13	Calculation and Experimental Study on Temperature Rise of a High OverLoad Tubular Permanent Magnet Linear Motor. IEEE Transactions on Plasma Science, 2013, 41, 1182-1187.	1.3	25
14	Design and Fabrication of a High-Efficiency Magnetostrictive Energy Harvester for High-Impact Vibration Systems. IEEE Transactions on Magnetics, 2015, 51, 1-4.	2.1	23
15	Voltage-Double Magnetically Coupled Impedance Source Networks. IEEE Transactions on Power Electronics, 2018, 33, 5983-5994.	7.9	22
16	Magnetostrictive energy generator for harvesting the rotation of human knee joint. AIP Advances, 2018, 8, .	1.3	18
17	System Efficiency Improvement for Electric Vehicles Adopting a Permanent Magnet Synchronous Motor Direct Drive System. Energies, 2017, 10, 2030.	3.1	16
18	Suppressing the Thrust Ripple of the Consequent-Pole Permanent Magnet Linear Synchronous Motor by Two-Step Design. IEEE Access, 2018, 6, 32935-32944.	4.2	15

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19	Research of Fast-Response Giant Magnetostrictive Actuator for Space Propulsion System. IEEE Transactions on Plasma Science, 2011, 39, 744-748.	1.3	14
20	Maximum Efficiency per Torque Control of Permanent-Magnet Synchronous Machines. Applied Sciences (Switzerland), 2016, 6, 425.	2.5	14
21	Comprehensive Comparison between Sic-mosfets and Si-igbts Based Electric Vehicle Traction Systems under Low Speed and Light Load. Energy Procedia, 2016, 88, 991-997.	1.8	14
22	A Novel Cooling Technique for the Windings of High-Torque-Density Permanent Magnet Machines. , 2018, , .		12
23	Novel high stepâ€up dual switches converter with reduced power device voltage stress for distributed generation system. IET Power Electronics, 2017, 10, 1800-1809.	2.1	9
24	Challenges of the Optimization of a High-Speed Induction Machine for Naval Applications. Energies, 2019, 12, 2431.	3.1	9
25	A High-Bandwidth and Strong Robust Current Control Strategy for PMLSM Drives. IEEE Access, 2018, 6, 40929-40939.	4.2	8
26	Improvements on permanent magnet synchronous motor by integrating heat pipes into windings for solar unmanned aerial vehicle. , 2022, 1, 100011.		8
27	Modelling self-sensing of a magnetostrictive actuator based on a terfenol-D rod. Chinese Physics B, 2014, 23, 127504.	1.4	7
28	Design and construction of magnetostrictive energy harvester for power generating floor systems. , 2015, , .		7
29	Zâ€source matrix rectifier. IET Power Electronics, 2016, 9, 2580-2590.	2.1	7
30	Force Ripple Estimation and Compensation of PMLSM With Incremental Extended State Modeling-Based Kalman Filter: A Practical Tuning Method. IEEE Access, 2019, 7, 108331-108342.	4.2	7
31	An Electromagnetic Design of a Fully Superconducting Generator for Wind Application. Energies, 2021, 14, 7811.	3.1	7
32	Influence on Launching Velocity by the Figure and Material Characteristic of Projectiles. IEEE Transactions on Magnetics, 2009, 45, 610-613.	2.1	6
33	Multi-Objective Optimization of Double Primary Tubular Permanent Magnet Synchronous Linear Motor in Wide Temperature Range Environment Based on Pareto Front Method. IEEE Access, 2020, 8, 207193-207203.	4.2	6
34	Design of Giant Magnetostrictive Actuator for fuel injector. , 2008, , .		5
35	Effect of structure parameters on the losses and efficiency of Surface-Mounted PMSM. , 2017, , .		5
36	Loss optimization control of permanent-magnet synchronous machines drive system for electric vehicles. , 2017, , .		5

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37	Mass Optimization Method of a Surface-Mounted Permanent Magnet Synchronous Motor Based on a Lightweight Structure. IEEE Access, 2020, 8, 40431-40444.	4.2	5
38	Efficiency Optimization Control of Permanent-Magnet Synchronous Machines for Electric Vehicle Traction Systems. , 2016, , .		4
39	Accurate Prediction of Leakage Flux Boundaries for an Axial-Flux MEMS Micromotor Design. IEEE Transactions on Applied Superconductivity, 2016, 26, 1-5.	1.7	4
40	Analysis and Suppression of Detent Force in Tubular Linear Electromagnetic Launcher for Space Use. , 2008, , .		3
41	Active suspensions based on the principles of giant magnetostriction. , 2008, , .		2
42	Magnetostrictive energy harvester with adjustable-air gap for low frequency human walking. , 2017, , .		2
43	Comparison Study on High Force Density Linear Motors for Compressor Application. Energies, 2021, 14, 7417.	3.1	2
44	Study on convection heat transfer of end-winding for a 10kW external rotor PMSM with open end cap. IEEE Transactions on Energy Conversion, 2022, , 1-1.	5.2	2
45	An improved predictive current control for PMLSM considering parameter variation. , 2015, , .		1
46	Research on the high efficiency external rotor permanent magnet motor based on Halbach array. , 2015, , .		1
47	Efficiency optimization control of permanent magnet synchronous motor system with SiC MOSFETs for electric vehicles. , 2017, , .		1
48	Investigation on Maximum Electromagnetic Torque of Permanent-Magnet Synchronous Machines. IEEE Access, 2020, 8, 113011-113020.	4.2	1
49	A Driver and Control Method for Primary Stator Discontinuous Segmented-PMLSM. Symmetry, 2021, 13, 2216.	2.2	1
50	Analysis and Optimization of Thrust Characteristics of Tubular Linear Electromagnetic Launcher for Space-Use. , 2008, , .		0
51	Influence on Launching Velocity by the Figure and Material Characteristic of Projectiles. , 2008, , .		0
52	Detent force analysis and suppression of electrical shock absorber. , 2008, , .		0
53	Research on inductance model of giant magnetostrictive actuator. , 2010, , .		0
54	Research on temperature characteristic of giant magnetostrictive actuator. , 2011, , .		0

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55	Conceptual design of self-sensing actuator based on giant magnetostrictive material. , 2014, , .		0
56	Research on Dynamic Characteristic of Giant Magnetostrictive Actuator. Applied Mechanics and Materials, 2014, 513-517, 2880-2883.	0.2	0
57	Sensorless Control of Primary Segmented Permanent Magnet Linear Motor. , 2016, , .		0
58	Novel Test Method for AC Current-Carrying Capability in the Consideration of Alternating Magnetic Field. IEEE Transactions on Applied Superconductivity, 2016, 26, 1-5.	1.7	0