

Jian Li

List of Publications by Year in descending order

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times ranked

5921
citing authors

#	ARTICLE	IF	CITATIONS
1	Electromagnetic Thermal Coupling Analysis of Permanent Magnet Synchronous Machines for Electric Vehicle Applications Based on Improved ($\mu + 1$) Evolution Strategy. IEEE Transactions on Magnetics, 2015, 51, 1-10.	1.2	2,671
2	Adaptive Second-Order Sliding-Mode Observer for PMSM Sensorless Control Considering VSI Nonlinearity. IEEE Transactions on Power Electronics, 2018, 33, 8994-9004.	5.4	270
3	Sensorless Control of Permanent Magnet Synchronous Machine Based on Second-Order Sliding-Mode Observer With Online Resistance Estimation. IEEE Transactions on Industry Applications, 2017, 53, 3672-3682.	3.3	205
4	Analysis of Torque Capability and Quality in Vernier Permanent-Magnet Machines. IEEE Transactions on Industry Applications, 2016, 52, 125-135.	3.3	201
5	Consequent-Pole Flux-Reversal Permanent-Magnet Machine for Electric Vehicle Propulsion. IEEE Transactions on Applied Superconductivity, 2016, 26, 1-5.	1.1	132
6	Advanced High Torque Density PM Vernier Machine With Multiple Working Harmonics. IEEE Transactions on Industry Applications, 2017, 53, 5295-5304.	3.3	129
7	Synthesis of Flux Switching Permanent Magnet Machines. IEEE Transactions on Energy Conversion, 2016, 31, 106-117.	3.7	118
8	Consequent-Pole Toroidal-Winding Outer-Rotor Vernier Permanent-Magnet Machines. IEEE Transactions on Industry Applications, 2015, 51, 4470-4481.	3.3	115
9	Topologies and analysis of flux-modulation machines. , 2015, , .		97
10	Principles of Stator DC Winding Excited Vernier Reluctance Machines. IEEE Transactions on Energy Conversion, 2016, 31, 935-946.	3.7	79
11	Rotor Design for High-Speed High-Power Permanent-Magnet Synchronous Machines. IEEE Transactions on Industry Applications, 2017, 53, 3411-3419.	3.3	79
12	Comparison of 12/8 and 6/4 Switched Reluctance Motor: Noise and Vibration Aspects. IEEE Transactions on Magnetics, 2008, 44, 4131-4134.	1.2	69
13	Design of Three-Phase Flux-Reversal Machines With Fractional-Slot Windings. IEEE Transactions on Industry Applications, 2016, 52, 2856-2864.	3.3	69
14	A Novel Hybrid Excitation Flux Reversal Machine for Electric Vehicle Propulsion. IEEE Transactions on Vehicular Technology, 2018, 67, 171-182.	3.9	68
15	Effects of MMF Harmonics on Rotor Eddy-Current Losses for Inner-Rotor Fractional Slot Axial Flux Permanent Magnet Synchronous Machines. IEEE Transactions on Magnetics, 2012, 48, 839-842.	1.2	61
16	Design Procedure of Dual-Stator Spoke-Array Vernier Permanent-Magnet Machines. IEEE Transactions on Industry Applications, 2015, 51, 2972-2983.	3.3	61
17	Investigation into Reduction of Vibration and Acoustic Noise in Switched Reluctance Motors in Radial Force Excitation and Frame Transfer Function Aspects. IEEE Transactions on Magnetics, 2009, 45, 4664-4667.	1.2	60
18	Analysis of a Dual-Rotor, Toroidal-Winding, Axial-Flux Vernier Permanent Magnet Machine. IEEE Transactions on Industry Applications, 2017, 53, 1920-1930.	3.3	58

#	ARTICLE	IF	CITATIONS
19	Comparative Thermal Analysis of IPMSMs With Integral-Slot Distributed-Winding (ISDW) and Fractional-Slot Concentrated-Winding (FSCW) for Electric Vehicle Application. IEEE Transactions on Industry Applications, 2019, 55, 3577-3588.	3.3	57
20	Analysis of Rotor Eccentricity in Switched Reluctance Motor With Parallel Winding Using FEM. IEEE Transactions on Magnetics, 2009, 45, 2851-2854.	1.2	55
21	Rotor Design and Eddy-Current Loss Suppression for High-Speed Machines With a Solid-PM Rotor. IEEE Transactions on Industry Applications, 2019, 55, 448-457.	3.3	54
22	Common-Mode Voltage Elimination for Dual Two-Level Inverter-Fed Asymmetrical Six-Phase PMSM. IEEE Transactions on Power Electronics, 2020, 35, 3828-3840.	5.4	53
23	Maximum-Torque-per-Ampere and Magnetization-State Control of a Variable-Flux Permanent Magnet Machine. IEEE Transactions on Industrial Electronics, 2018, 65, 1158-1169.	5.2	49
24	Electromagnetic Force and Vibration Analysis of Permanent-Magnet-Assisted Synchronous Reluctance Machines. IEEE Transactions on Industry Applications, 2018, 54, 4246-4256.	3.3	48
25	Ventilation and Thermal Improvement of Radial Forced Air-Cooled FSCW Permanent Magnet Synchronous Wind Generators. IEEE Transactions on Industry Applications, 2017, 53, 3447-3456.	3.3	47
26	Design and Analysis of a Flux Reversal Machine With Evenly Distributed Permanent Magnets. IEEE Transactions on Industry Applications, 2018, 54, 172-183.	3.3	46
27	Optimal Design of an Axial-Flux Switched Reluctance Motor With Grain-Oriented Electrical Steel. IEEE Transactions on Industry Applications, 2017, 53, 5327-5337.	3.3	45
28	Fault-Tolerant Predictive Control of Six-Phase PMSM Drives Based on Pulsewidth Modulation. IEEE Transactions on Industrial Electronics, 2019, 66, 4992-5003.	5.2	45
29	A Stator-PM Consequent-Pole Vernier Machine With Hybrid Excitation and DC-Biased Sinusoidal Current. IEEE Transactions on Magnetics, 2017, 53, 1-4.	1.2	44
30	Electromagnetic Force and Vibration Study on Axial Flux Permanent Magnet Synchronous Machines With Dual Three-Phase Windings. IEEE Transactions on Industrial Electronics, 2020, 67, 115-125.	5.2	44
31	Multilayer Windings Effect on Interior PM Machines for EV Applications. IEEE Transactions on Industry Applications, 2015, 51, 2208-2215.	3.3	41
32	Flux Modulation Principles of DC-Biased Sinusoidal Current Vernier Reluctance Machines. IEEE Transactions on Industry Applications, 2018, 54, 3187-3196.	3.3	41
33	Effect of Multilayer Windings on Rotor Losses of Interior Permanent Magnet Generator With Fractional-Slot Concentrated-Windings. IEEE Transactions on Magnetics, 2014, 50, 1-4.	1.2	40
34	Torque Performance Analysis of Three-Phase Flux Reversal Machines. IEEE Transactions on Industry Applications, 2017, 53, 2110-2119.	3.3	40
35	Design Procedure of Flux Reversal Permanent Magnet Machines. IEEE Transactions on Industry Applications, 2017, 53, 4232-4241.	3.3	39
36	Magnet-Frozen-Permeability FEA and DC-Biased Measurement for Machine Inductance: Application on a Variable-Flux PM Machine. IEEE Transactions on Industrial Electronics, 2018, 65, 4599-4607.	5.2	38

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37	Demagnetization Performance of a 7 MW Interior Permanent Magnet Wind Generator With Fractional-Slot Concentrated Windings. IEEE Transactions on Magnetics, 2015, 51, 1-4.	1.2	36
38	Analysis of the Power Factor of Stator DC-Excited Vernier Reluctance Machines. IEEE Transactions on Magnetics, 2015, 51, 1-4.	1.2	35
39	Analysis and Design of Triple-Rotor Axial-Flux Spoke-Array Vernier Permanent Magnet Machines. IEEE Transactions on Industry Applications, 2018, 54, 244-253.	3.3	34
40	Design, Analysis, and Prototyping of a Water-Cooled Axial-Flux Permanent-Magnet Machine for Large-Power Direct-Driven Applications. IEEE Transactions on Industry Applications, 2019, 55, 3555-3565.	3.3	34
41	Hybrid Excitation Stator PM Vernier Machines With Novel DC-Biased Sinusoidal Armature Current. IEEE Transactions on Industry Applications, 2018, 54, 1339-1348.	3.3	33
42	Study on High Efficiency Permanent Magnet Linear Synchronous Motor for Maglev. IEEE Transactions on Applied Superconductivity, 2018, 28, 1-5.	1.1	32
43	Improved Torque Capacity for Flux Modulated Machines by Injecting DC Currents Into the Armature Windings. IEEE Transactions on Magnetics, 2017, 53, 1-5.	1.2	31
44	Cogging Torque Analysis and Minimization of Axial Flux PM Machines With Combined Rectangle-Shaped Magnet. IEEE Transactions on Industry Applications, 2017, 53, 1018-1027.	3.3	31
45	A Synthetic Frozen Permeability Method for Torque Separation in Hybrid PM Variable-Flux Machines. IEEE Transactions on Applied Superconductivity, 2018, 28, 1-5.	1.1	30
46	Rotor design considerations for a variable-flux flux-intensifying interior permanent magnet machine with improved torque quality and reduced magnetization current. , 2015, , .		28
47	Strategy and Implementation of Harmonic-Reduced Synchronized SVPWM for High-Power Traction Machine Drives. IEEE Transactions on Power Electronics, 2020, 35, 12457-12471.	5.4	26
48	Design Considerations of Stator DC-Winding Excited Vernier Reluctance Machines Based on the Magnetic Gear Effect. IEEE Transactions on Industry Applications, 2017, 53, 1028-1037.	3.3	25
49	Analysis, Modeling, and Current Trajectory Control of Magnetization State Manipulation in Variable-Flux Permanent Magnet Machines. IEEE Transactions on Industrial Electronics, 2019, 66, 5133-5143.	5.2	25
50	Stator/Rotor Slot and Winding Pole Pair Combinations of DC-Biased Current Vernier Reluctance Machines. IEEE Transactions on Industry Applications, 2018, 54, 5967-5977.	3.3	24
51	Reduction of the Detent Force in a Flux-Switching Permanent Magnet Linear Motor. IEEE Transactions on Energy Conversion, 2019, 34, 1695-1705.	3.7	24
52	A Novel Dual-Stator Vernier Permanent Magnet Machine. IEEE Transactions on Magnetics, 2017, 53, 1-5.	1.2	23
53	Eddy-Current Calculation of Solid Components in Fractional Slot Axial Flux Permanent Magnet Synchronous Machines. IEEE Transactions on Magnetics, 2011, 47, 4254-4257.	1.2	22
54	Design of a Dual-Stator LTS Vernier Machine for Direct-Drive Wind Power Generation. IEEE Transactions on Applied Superconductivity, 2016, 26, 1-5.	1.1	22

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55	Variable Switching Sequence PWM Strategy of Dual Three-Phase Machine Drive for High-Frequency Current Harmonic Suppression. IEEE Transactions on Power Electronics, 2020, 35, 4984-4995.	5.4	22
56	Study on Steady-State Errors for Asymmetrical Six-Phase Permanent Magnet Synchronous Machine Fault-Tolerant Predictive Current Control. IEEE Transactions on Power Electronics, 2020, 35, 640-651.	5.4	20
57	Study of Direct-Drive Permanent Magnet Synchronous Generators with Solid Rotor Back-Iron and Different Windings. IEEE Transactions on Industry Applications, 2015, , 1-1.	3.3	19
58	On-Line Compensation of Resolver Periodic Error for PMSM Drives. IEEE Transactions on Industry Applications, 2019, 55, 5990-6000.	3.3	19
59	Hybrid excited vernier PM machines with novel DC-biased sinusoidal armature current. , 2016, , .		18
60	Six-Phase Double-Stator Inner-Rotor Axial Flux PM Machines With Novel Detached Winding. IEEE Transactions on Industry Applications, 2017, 53, 1931-1941.	3.3	18
61	Fault-tolerant predictive current control with two-vector modulation for six-phase permanent magnet synchronous machine drives. IET Electric Power Applications, 2018, 12, 169-178.	1.1	18
62	Optimal design of axial flux switched reluctance motor for electric vehicle application. , 2014, , .		17
63	Dynamic reduction of unbalanced magnetic force and vibration in switched reluctance motor by the parallel paths in windings. Mathematics and Computers in Simulation, 2010, 81, 407-419.	2.4	16
64	Flux modulation principles of DC-biased sinusoidal current vernier reluctance machines. , 2016, , .		16
65	Review of off-line synchronous inductance measurement method for permanent magnet synchronous machines. , 2014, , .		14
66	Development and experimental evaluation of a single-winding, dual-stator, spoke-array vernier permanent magnet machines. , 2015, , .		14
67	A consequent pole, dual rotor, axial flux vernier permanent magnet machine. , 2015, , .		14
68	A Novel Vernier Reluctance Fully Superconducting Direct Drive Synchronous Generator With Concentrated Windings for Wind Power Application. IEEE Transactions on Applied Superconductivity, 2016, 26, 1-5.	1.1	14
69	Reduction of Unbalanced Axial Magnetic Force in Postfault Operation of a Novel Six-Phase Double-Stator Axial-Flux PM Machine Using Model Predictive Control. IEEE Transactions on Industry Applications, 2017, 53, 5461-5469.	3.3	14
70	Analysis of torque capability and quality in vernier permanent magnet machines. , 2014, , .		13
71	Comparison of Stator DC Current Excited Vernier Reluctance Machines With Different Field Winding Configurations. IEEE Transactions on Magnetics, 2017, 53, 1-4.	1.2	13
72	DC-Field Excitation Variable Flux Reluctance Starter Generator With Modular Structure for Fault-Tolerant Capability Improvement. IEEE Transactions on Industrial Electronics, 2021, 68, 6444-6455.	5.2	13

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73	Analysis of a Hybrid Permanent Magnet Variable-Flux Machine for Electric Vehicle Traction Considering Magnetizing and Demagnetizing Current. IEEE Transactions on Industry Applications, 2021, 57, 5983-5992.	3.3	13
74	Comparative Study on Vibration Behaviors of Permanent Magnet Assisted Synchronous Reluctance Machines With Different Rotor Topologies. IEEE Transactions on Industry Applications, 2021, 57, 1420-1428.	3.3	13
75	Stator/rotor slot and winding pole pair combinations of DC biased sinusoidal vernier reluctance machines. , 2016, , .		11
76	Design of a Compact Axial Flux Permanent Magnet Machine for Hybrid Electric Vehicle. IEEE Transactions on Industrial Electronics, 2021, 68, 6630-6639.	5.2	11
77	Design of three-phase flux reversal machines with fractional-slot windings. , 2015, , .		10
78	Rotor design for a high-speed high-power permanent-magnet synchronous machine. , 2015, , .		10
79	A Novel Triple-Rotor Axial-Flux Vernier Permanent Magnet Machine. IEEE Transactions on Applied Superconductivity, 2016, 26, 1-5.	1.1	10
80	Torque ripple reduction techniques for stator DC winding excited vernier reluctance machines. , 2016, , .		10
81	Super-twisting algorithm based sliding mode observer for wide-speed range PMSM sensorless control considering VSI nonlinearity. , 2017, , .		10
82	Finite set model predictive MTPA control with VSD method for asymmetric six-phase PMSM. , 2017, , .		10
83	A Hybrid Calculation Method of Electromagnetic Vibration for Electrical Machines Considering High-Frequency Current Harmonics. IEEE Transactions on Industrial Electronics, 2022, 69, 10385-10395.	5.2	10
84	Analysis of FSCW SPM servo motor with static, dynamic and mixed eccentricity in aspects of radial force and vibration. , 2014, , .		9
85	Evaluation of high-speed permanent magnet synchronous machine drive with three-level and two-level inverter. , 2015, , .		9
86	Design considerations and parameter optimization of stator wound field synchronous machines based on magnetic the gear effect. , 2015, , .		9
87	Analysis and design of a dual-rotor axial-flux vernier permanent magnet machine. , 2015, , .		9
88	Super-twisting algorithm based sliding-mode observer with online parameter estimation for sensorless control of permanent magnet synchronous machine. , 2016, , .		9
89	Design of line-start permanent magnet motor with cost reduction and performance improvements. International Journal of Applied Electromagnetics and Mechanics, 2012, 39, 873-879.	0.3	8
90	Development of a natural cooled axial flux permanent magnet generator for wind turbine. , 2012, , .		8

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91	Effect of unbalanced and inclined air-gap in double-stator inner-rotor axial flux permanent magnet machine. , 2014, , .		8
92	Advanced high torque density non-overlapping winding PM vernier machines. , 2016, , .		8
93	Comparison of two rotor topologies for high-speed permanent magnet synchronous machines. , 2016, , .		8
94	Rotor loss calculation and thermal analysis of a dual-stator axial-flux permanent magnet machine with combined rectangle-shaped magnets. , 2017, , .		8
95	Strategy of Synchronized SVPWM for Dual Three-Phase Machines in Full Modulation Range. IEEE Transactions on Power Electronics, 2022, 37, 3272-3282.	5.4	8
96	Structure analysis of axial flux permanent magnet synchronous machine for wind generators. International Journal of Applied Electromagnetics and Mechanics, 2012, 39, 1027-1033.	0.3	7
97	Multi-layer windings effect on interior PM machines for EV applications. , 2014, , .		7
98	Magnetization and performance analysis of a variable-flux flux-intensifying interior permanent magnet machine. , 2015, , .		7
99	Design procedure of flux reversal permanent magnet machines. , 2016, , .		7
100	Comparative thermal analysis of IPMSMs with integral-slot distributed-winding (ISDW) and fractional-slot concentrated-winding (FSCW) for electric vehicle application. , 2017, , .		7
101	Vibration Suppression for Flux-Switching PM Machines. IEEE Transactions on Energy Conversion, 2018, 33, 959-969.	3.7	7
102	Randomized Pulse Pattern Strategy of Synchronized SVPWM for Low-Frequency-Ratio Applications. IEEE Transactions on Power Electronics, 2021, 36, 6404-6414.	5.4	7
103	A permanent magnet traction machine with wide high efficiency range for EV application. , 2015, , .		6
104	Structural Optimization of a Permanent-Magnet Direct-Drive Generator Considering Eccentric Electromagnetic Force. IEEE Transactions on Magnetics, 2015, 51, 1-4.	1.2	6
105	Split ratio optimization of high-speed permanent magnet synchronous machines based on thermal resistance network. , 2016, , .		6
106	A Novel Hybrid Excitation Flux Reversal Machine for Electric Vehicle Propulsion. , 2016, , .		6
107	Post-fault model predictive control of asymmetrical six-phase permanent magnet machine with improved mathematical model. , 2017, , .		6
108	Design of a Hybrid Magnets Variable Flux Memory Machine Based on Hysteresis Model. , 2019, , .		6

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109	Research on influence of stator shapes and frames of switched reluctance motor to thermal characteristics. International Journal of Applied Electromagnetics and Mechanics, 2010, 33, 1469-1476.	0.3	5
110	Rotor eddy-current loss minimization in high-speed PMSMs. , 2016, , .		5
111	A High Torque Density Vernier PM Machines for Hybrid Electric Vehicle Applications. , 2016, , .		5
112	Electromagnetic design issues of high-speed permanent magnet machine. , 2016, , .		5
113	Design and analysis of a novel flux reversal machine. , 2016, , .		5
114	A Method to Improve Torque Density and Reduce Magnetization Current in a Variable-Flux Flux-Intensifying Interior Permanent Magnet Machine. , 2016, , .		5
115	Improvement of Integrated-Induction-Based Hybrid Excitation Brushless DC Generator by Employing Novel Consequent-Pole Rotor. IEEE Transactions on Industrial Electronics, 2022, 69, 12042-12054.	5.2	5
116	Study on AC Copper Losses in an Air-Cored Axial Flux Permanent Magnet Electrical Machine With Flat Wires. IEEE Transactions on Industrial Electronics, 2022, 69, 13255-13264.	5.2	5
117	Design of high performance line start permanent magnet synchronous motor with high inertia load. International Journal of Applied Electromagnetics and Mechanics, 2010, 33, 621-628.	0.3	4
118	Optimization of Switched Reluctance Motor for Efficiency Improvement Using Response Surface Model and Kriging Model. , 2011, , .		4
119	Reduction of unbalanced axial magnetic force in post-fault operation of a novel six-phase double-stator axial flux PM machine using model predictive control. , 2016, , .		4
120	A Novel Axial Flux Magnetic-Field-Modulated Dual-Mechanical-Port Dual-Electrical-Port Machine for Hybrid Electric Vehicle. , 2016, , .		4
121	Synchronous SVPWM for field-oriented control of PMSM using phase-lock loop. , 2017, , .		4
122	On-line Compensation of Periodic Error in Resolver Signals for PMSM Drives. , 2018, , .		4
123	Design and Analysis of a Water-Cooled Axial Flux Permanent-Magnet Machine for Large Power Direct-Driven Applications. , 2018, , .		4
124	Design and Optimization of a Permanent Magnet Synchronous Machine for Low Vibration and Noise Applications. , 2018, , .		3
125	A Sleeve-Free Interior Permanent Magnet High Speed Motor with Non-Uniform Airgap. , 2019, , .		3
126	Comparative Study on Vibration Behaviors of Permanent Magnet Assisted Synchronous Reluctance Machines with Different Rotor Topologies. , 2019, , .		3

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127	Dynamic vibration analysis of axial flux PM synchronous machines using coupled-field analysis. International Journal of Applied Electromagnetics and Mechanics, 2008, 28, 219-225.	0.3	2
128	Comparison of single and dual stator configurations of switched reluctance generator. International Journal of Applied Electromagnetics and Mechanics, 2012, 39, 851-857.	0.3	2
129	Study on fractional slot permanent magnet synchronous machine for wind turbines. , 2012, , .		2
130	Analytical determination of optimal split ratio for interior permanent magnet synchronous motor. , 2014, , .		2
131	Ventilation and thermal improvement of radial forced air-cooled FSCW permanent magnet synchronous wind generator. , 2015, , .		2
132	Cogging torque analysis and minimization of axial flux PM machines. , 2015, , .		2
133	Optimal design of an axial flux switched reluctance motor with grain oriented electrical steel. , 2015, , .		2
134	Analysis and design of triple-rotor axial-flux spoke-array vernier permanent magnet machines. , 2016, , .		2
135	Magnetic stress and vibration analysis of the permanent magnet assisted synchronous reluctance machines. , 2017, , .		2
136	A Restart Strategy of a Rotating Induction Machine for Inrush Current Elimination. IEEE Transactions on Industry Applications, 2020, 56, 4906-4914.	3.3	2
137	Thermal Analysis of Canned Induction Motor for Coolant Pump Considering the Eddy Current Loss in Cans. Materials Science Forum, 2010, 670, 466-476.	0.3	1
138	Design and analysis of a novel vernier reluctance fully superconducting synchronous generator with LTS windings for wind power generation. , 2015, , .		1
139	Vernier reluctance dual-stator inner-rotor machines with semi-closed slot. , 2015, , .		1
140	Design and comparison of novel flux reversal machines with large stator slot opening. , 2016, , .		1
141	Magnetic Stress and Vibration Analysis of the Flux-Switching Permanent-Magnet Machines. , 2016, , .		1
142	A new predictive direct torque control for vernier permanent magnet synchronous motor based on duty ratio modulation. , 2016, , .		1
143	A Restart Strategy of a Rotating Induction Machine for Inrush Current Elimination. , 2018, , .		1
144	Influence of slot opening on electromagnetic performances in fractional-slot interior permanent-magnet machines with concentrated windings for EV application. , 2013, , .		0

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145	Advanced mathematical model for surface mounted permanent magnet machines with equivalent virtual salient rotor. , 2015, , .		0
146	Comparison of stator DC current excited vernier reluctance machines with different field winding configurations. , 2016, , .		0
147	Improved torque and flux weakening capability for flux modulated machines by injecting DC currents into the armature windings. , 2016, , .		0
148	Design and optimization of an interior permanent magnet machine with asymmetric stator iron yoke applied in rail transportation. , 2017, , .		0
149	Research and Experimental Evaluation on the Control Strategy of the Linear Induction Motor for Maglev. , 2021, , .		0