Guoqiang Zhang

List of Publications by Year in descending order

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90 papers

2,942 citations

201385 27 h-index 53 g-index

100 all docs

 $\begin{array}{c} 100 \\ \\ \text{docs citations} \end{array}$

100 times ranked

1516 citing authors

#	Article	IF	CITATIONS
1	ADALINE-Network-Based PLL for Position Sensorless Interior Permanent Magnet Synchronous Motor Drives. IEEE Transactions on Power Electronics, 2016, 31, 1450-1460.	5.4	228
2	Quadrature PLL-Based High-Order Sliding-Mode Observer for IPMSM Sensorless Control With Online MTPA Control Strategy. IEEE Transactions on Energy Conversion, 2013, 28, 214-224.	3.7	202
3	A review of sensorless control methods for AC motor drives. CES Transactions on Electrical Machines and Systems, 2018, 2, 104-115.	2.7	191
4	Adaptive Compensation Method of Position Estimation Harmonic Error for EMF-Based Observer in Sensorless IPMSM Drives. IEEE Transactions on Power Electronics, 2014, 29, 3055-3064.	5.4	174
5	Maximum Efficiency Per Ampere Control of Permanent-Magnet Synchronous Machines. IEEE Transactions on Industrial Electronics, 2015, 62, 2135-2143.	5. 2	148
6	Comparative Investigation of Pseudorandom High-Frequency Signal Injection Schemes for Sensorless IPMSM Drives. IEEE Transactions on Power Electronics, 2017, 32, 2123-2132.	5.4	127
7	Square-Wave Voltage Injection Algorithm for PMSM Position Sensorless Control With High Robustness to Voltage Errors. IEEE Transactions on Power Electronics, 2017, 32, 5425-5437.	5.4	125
8	Position Estimation Error Reduction Using Recursive-Least-Square Adaptive Filter for Model-Based Sensorless Interior Permanent-Magnet Synchronous Motor Drives. IEEE Transactions on Industrial Electronics, 2014, 61, 5115-5125.	5.2	119
9	Enhanced Position Observer Using Second-Order Generalized Integrator for Sensorless Interior Permanent Magnet Synchronous Motor Drives. IEEE Transactions on Energy Conversion, 2014, 29, 486-495.	3.7	112
10	Pseudo-Random High-Frequency Square-Wave Voltage Injection Based Sensorless Control of IPMSM Drives for Audible Noise Reduction. IEEE Transactions on Industrial Electronics, 2016, 63, 7423-7433.	5.2	104
11	Self-Commissioning of Permanent Magnet Synchronous Machine Drives at Standstill Considering Inverter Nonlinearities. IEEE Transactions on Power Electronics, 2014, 29, 6615-6627.	5.4	103
12	Sensorless Control Scheme of IPMSMs Using HF Orthogonal Square-Wave Voltage Injection Into a Stationary Reference Frame. IEEE Transactions on Power Electronics, 2019, 34, 2573-2584.	5.4	87
13	Active Disturbance Rejection Control Strategy for Signal Injection-Based Sensorless IPMSM Drives. IEEE Transactions on Transportation Electrification, 2018, 4, 330-339.	5. 3	84
14	Offline Parameter Self-Learning Method for General-Purpose PMSM Drives With Estimation Error Compensation. IEEE Transactions on Power Electronics, 2019, 34, 11103-11115.	5.4	84
15	Rotor Position Estimation of PMSM in Low-Speed Region and Standstill Using Zero-Voltage Vector Injection. IEEE Transactions on Power Electronics, 2018, 33, 7948-7958.	5.4	83
16	An Impedance Model-Based Multiparameter Identification Method of PMSM for Both Offline and Online Conditions. IEEE Transactions on Power Electronics, 2021, 36, 727-738.	5.4	77
17	Multiple-AVF Cross-Feedback-Network-Based Position Error Harmonic Fluctuation Elimination for Sensorless IPMSM Drives. IEEE Transactions on Industrial Electronics, 2016, 63, 821-831.	5.2	69
18	Discrete-Time Low-Frequency-Ratio Synchronous-Frame Full-Order Observer for Position Sensorless IPMSM Drives. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2017, 5, 870-879.	3.7	57

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19	Pseudorandom-Frequency Sinusoidal Injection Based Sensorless IPMSM Drives With Tolerance for System Delays. IEEE Transactions on Power Electronics, 2019, 34, 3623-3632.	5.4	52
20	Current Sensor Fault-Tolerant Control Strategy for Encoderless PMSM Drives Based on Single Sliding Mode Observer. IEEE Transactions on Transportation Electrification, 2020, 6, 679-689.	5.3	52
21	Saliency-Based Sensorless Control for SynRM Drives With Suppression of Position Estimation Error. IEEE Transactions on Industrial Electronics, 2019, 66, 5839-5849.	5.2	47
22	Saliency-based position sensorless control methods for PMSM drives - A review. Chinese Journal of Electrical Engineering, 2017, 3, 14-23.	2.3	46
23	Robust Low-Cost Control Scheme of Direct-Drive Gearless Traction Machine for Elevators Without a Weight Transducer. IEEE Transactions on Industry Applications, 2012, 48, 996-1005.	3.3	43
24	Hybrid Pseudorandom Signal Injection for Position Sensorless SynRM Drives With Acoustic Noise Reduction. IEEE Transactions on Transportation Electrification, 2022, 8, 1313-1325.	5.3	40
25	Adaptive Pseudorandom High-Frequency Square-Wave Voltage Injection Based Sensorless Control for SynRM Drives. IEEE Transactions on Power Electronics, 2021, 36, 3200-3210.	5.4	34
26	Current Sensor Fault-Tolerant Control for Encoderless IPMSM Drives Based on Current Space Vector Error Reconstruction. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2020, 8, 3658-3668.	3.7	31
27	Enhanced Flux-Weakening Control Method for Reduced DC-Link Capacitance IPMSM Drives. IEEE Transactions on Power Electronics, 2019, 34, 7788-7799.	5.4	27
28	A Five-Level Space Vector Modulation Scheme for Parallel Operated Three-Level Inverters With Reduced Line Current Distortion. IEEE Transactions on Power Electronics, 2020, 35, 11235-11249.	5.4	27
29	Weight-Transducerless Starting Torque Compensation of Gearless Permanent-Magnet Traction Machine for Direct-Drive Elevators. IEEE Transactions on Industrial Electronics, 2014, 61, 4594-4604.	5.2	26
30	Pseudorandom-Frequency Sinusoidal Injection for Position Sensorless IPMSM Drives Considering Sample and Hold Effect. IEEE Transactions on Power Electronics, 2019, 34, 9929-9941.	5.4	26
31	An Offline Parameter Self-Learning Method Considering Inverter Nonlinearity With Zero-Axis Voltage. IEEE Transactions on Power Electronics, 2021, 36, 14098-14109.	5.4	23
32	Low-Noise Initial Position Detection Method for Sensorless Permanent Magnet Synchronous Motor Drives. IEEE Transactions on Power Electronics, 2020, 35, 13333-13344.	5.4	22
33	Impedance Based Stabilization Control Method for Reduced DC-Link Capacitance IPMSM Drives. IEEE Transactions on Power Electronics, 2019, 34, 9879-9890.	5.4	17
34	Adaptive Iterative Learning Control-Based Rotor Position Harmonic Error Suppression Method for Sensorless PMSM Drives. IEEE Transactions on Industrial Electronics, 2022, 69, 10870-10881.	5.2	17
35	Implementation of Five-Level DPWM on Parallel Three-Level Inverters to Reduce Common-Mode Voltage and AC Current Ripples. IEEE Transactions on Industry Applications, 2020, 56, 4017-4027.	3.3	15
36	Fault Diagnosis Method of Current Sensor for Permanent Magnet Synchronous Motor Drives. , 2018, , .		14

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37	Nonlinear Active Disturbance Rejection Control Strategy for Permanent Magnet Synchronous Motor Drives. IEEE Transactions on Energy Conversion, 2022, , 1-1.	3.7	13
38	Current Vector Angle Adaptive Adjustment Based Rotor Position Offset Error Suppression Method for Sensorless PMSM Drives. IEEE Transactions on Power Electronics, 2021, 36, 10536-10547.	5.4	12
39	Online Estimation Method of DC-Link Capacitors for Reduced DC-Link Capacitance IPMSM Drives. IEEE Transactions on Power Electronics, 2021, 36, 12196-12201.	5.4	12
40	Dual Antiovervoltage Control Scheme for Electrolytic Capacitorless IPMSM Drives With Coefficient Autoregulation. IEEE Transactions on Power Electronics, 2020, 35, 2895-2907.	5.4	11
41	Modeling and Analysis of Bridge-Leg Crosstalk of GaN HEMT Considering Nonlinear Junction Capacitances. IEEE Transactions on Power Electronics, 2021, 36, 4429-4439.	5.4	11
42	Phase Current Reconstruction Error Suppression Method for Single DC-Link Shunt PMSM Drives at Low-Speed Region. IEEE Transactions on Power Electronics, 2022, 37, 7067-7081.	5.4	11
43	An Antiovervoltage Control Scheme for Electrolytic Capacitorless IPMSM Drives Based on Stator Current Vector Orientation. IEEE Transactions on Industrial Electronics, 2020, 67, 3517-3527.	5.2	10
44	Synchronous Switching of Non-Line-Start Permanent Magnet Synchronous Machines From Inverter to Grid Drives. IEEE Transactions on Power Electronics, 2016, 31, 3717-3727.	5.4	9
45	An Inverter-Nonlinearity-Immune Offline Inductance Identification Method for PMSM Drives Based on Equivalent Impedance Model. IEEE Transactions on Power Electronics, 2022, 37, 7100-7112.	5.4	9
46	Online Temperature Identification Strategy for Position Sensorless PMSM Drives With Position Error Adaptive Compensation. IEEE Transactions on Power Electronics, 2022, 37, 8502-8512.	5.4	9
47	High-Gain Nonlinear Active Disturbance Rejection Control Strategy for Traction Permanent Magnet Motor Drives. IEEE Transactions on Power Electronics, 2022, 37, 13135-13146.	5.4	9
48	Current Sensor Fault Diagnosis and Fault-Tolerant Control for Encoderless PMSM Drives Based on Dual Sliding-Mode Observers. , 2019, , .		8
49	Torque Ripples Minimization of Sensorless SynRM Drives for Low-Speed Operation Using Bi-HFSI Scheme. IEEE Transactions on Industrial Electronics, 2021, 68, 5559-5570.	5.2	8
50	Suppression of Beat Phenomenon for Electrolytic Capacitorless Motor Drives Accounting for Sampling Delay of DC-Link Voltage. IEEE Transactions on Industrial Electronics, 2022, 69, 1167-1176.	5.2	8
51	Adaptive Quasi-Proportional-Resonant Observer-Based Rotor Position Estimation for Sensorless PMSM Drives. IEEE Transactions on Power Electronics, 2022, 37, 15221-15233.	5.4	8
52	High Frequency Torque Ripple Suppression for High Frequency Signal Injection Based Sensorless Control of SynRMs. , 2019, , .		6
53	High-Frequency Signal Injection using Extend State Observer for Position Sensorless PMSM Drives. , 2020, , .		6
54	Improvements in permanent magnet synchronous machines with delta-connected winding. , 2014, , .		5

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55	A Speed Adaptive Scheme-Based Full-Order Observer for Sensorless Induction Motor Drives in Low-Speed Regenerating Operation Range. , 2018, , .		5
56	Crosstalk Suppression Method for GaN-Based Bridge Configuration Using Negative Voltage Self-Recovery Gate Drive. IEEE Transactions on Power Electronics, 2022, 37, 4406-4418.	5 . 4	5
57	Fundamental PWM Excitation Based Low-Speed Sensorless Control Method for PMSM Drives. , 2020, , .		4
58	Analysis and Compensation of Position Estimation Error for Sensorless Reduced DC-Link Capacitance IPMSM Drives. IEEE Transactions on Industrial Electronics, 2023, 70, 3213-3221.	5.2	4
59	Torque Ripple Compensation With Anti-Overvoltage for Electrolytic Capacitorless PMSM Compressor Drives. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2022, 10, 6148-6159.	3.7	4
60	Low - speed dynamic performance improvement strategy based on ADRC for sensorless IPMSM control system. , 2017, , .		2
61	Eliminating Position Estimation Error Caused by Cross-Coupling Effect in Saliency-Based Sensorless Control of SynRMs., 2018,,.		2
62	A Novel Demodulation Method Based High-Frequency Signal Injection for Sensorless SPMSM Control Considering Cross-Saturation Effect., 2018,,.		2
63	Speed Ripple Suppression of Reduced DC-link Capacitance IPMSM Drives for Air-Conditioning Applications. , 2019, , .		2
64	Position and Speed Detection Method Based on Cross-Decoupling Network Filtering for Gearless Traction Motor Drives at Low-Speed Operation. IEEE Transactions on Power Electronics, 2021, 36, 11862-11874.	5 . 4	2
65	Position and Speed Detection Method Based on Adaptive Extended Moving-Window Linear Regression for Traction Machine Drives. IEEE Transactions on Transportation Electrification, 2022, 8, 2884-2897.	5. 3	2
66	Grid Current Harmonic Suppression for Motor Drive with Reduced DC-Link Capacitance in Weak Grid., 2021,,.		2
67	Remanufacturing of low-efficiency induction machines with interior permanent-magnet rotors for energy efficiency improvement. , $2014, \ldots$		1
68	Pseudo-Random High-Frequency Sinusoidal Voltage Injection Based Sensorless Control for IPMSM Drives. , 2018, , .		1
69	Maximum Torque Increase and Performance Optimization for Induction Motor Field-Weakening Control. , 2018, , .		1
70	Position Error Fluctuation Elimination for Model-Based Self-Sensing IPMSM Drives Incorporating ROGI Decoupling Network. , 2019, , .		1
71	An Anti-Overvoltage Strategy for Electrolytic Capacitorless IPMSM Drives Using Power Controller. , 2019, , .		1
72	Saliency-Tracking-Based Sensorless Control for PMSM Drives. , 2020, , 37-80.		1

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73	Sensorless Field Weakening Strategy With Overmodulation for High-Speed SPMSM Drives. , 2020, , .		1
74	Field-Weakening Control Strategy of High-Speed Permanent Magnet Synchronous Motor Based on Improved Voltage Phase Angle Control., 2021,,.		1
75	Adaptive notch filter based harmonic self-compensated sliding-mode observer for position sensorless IPMSM drives. , 2015, , .		O
76	Soft start and synchronous switching of permanent magnet synchronous machines without damping windings. , 2015, , .		0
77	Practical Issues of Sensorless Control for PMSM Drives. , 2020, , 281-295.		O
78	Basic Knowdge of AC Motor Drives. , 2021, , 1-25.		0
79	Resonance Suppression Between Line Inductor and DC-Link Capacitor. , 2021, , 53-83.		O
80	Impedance Model Based Stability Control. , 2021, , 85-101.		0
81	Motor Loss Based Anti-Overvoltage Control. , 2021, , 147-187.		0
82	Voltage-Current Hybrid Model Based Extended Flux Observer with Multiple SOGIs for Sensorless IPMSM Drives. , 2021, , .		0
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87	Initial Position Detection for PMSM Traction Drives. , 2022, , 39-66.		O
88	ADRC Strategy for Gearless PMSM Traction Elevators. , 2022, , 163-181.		0
89	Permanent Magnet Synchronous Motor Drives for Gearless Traction Elevators. , 2022, , .		O
90	Permanent Magnet Synchronous Motor Traction System—An Overview. , 2022, , 1-9.		0