Davood Arab Khaburi

List of Publications by Year
in descending order

83	2,319	331670 21	345221 36
papers	citations	h-index	g-index

83	83	83	1601
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Sensorless vector control scheme for an induction motor fed by MMC. International Journal of Electronics, 2023, 110, 1283-1305.	1.4	3
2	Simple twoâ€stage weighting factor design for finite control set model predictive control of modular multilevel converters. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2022, 35, e2938.	1.9	3
3	Latest Advances of Model Predictive Control in Electrical Drivesâ€”Part I: Basic Concepts and Advanced Strategies. IEEE Transactions on Power Electronics, 2022, 37, 3927-3942.	7.9	166
4	Latest Advances of Model Predictive Control in Electrical Drivesâ€”Part II: Applications and Benchmarking With Classical Control Methods. IEEE Transactions on Power Electronics, 2022, 37, 5047-5061.	7.9	112
5	Fault Tolerance Analysis of Five-Level Neutral-Point-Clamped Inverters under Clamping Diode Open-Circuit Failure. Electronics (Switzerland), 2022, 11, 1461.	3.1	2
6	Modeling, simulation, and parameters identification of a lithium-ion battery used in electric vehicles. , 2022, , .		2
7	A Real-Time Fault-Tolerant Control Approach to Ensure the Resiliency of a Self-Healing Multilevel Converter. Energies, 2022, 15, 4721.	3.1	1
8	A Real-Time Fault Diagnosis for Neutral-Point-Clamped Inverters Based on Failure-Mode Algorithm. IEEE Transactions on Industrial Informatics, 2021, 17, 1100-1110.	11.3	18
9	Overmodulation Methods for Modulated Model Predictive Control and Space Vector Modulation. IEEE Transactions on Power Electronics, 2021, 36, 4549-4559.	7.9	27
10	Open-Switch and Open-Clamping Diode Fault Diagnosis for Single-Phase Five-Level Neutral-Point-Clamped Inverters. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2021, 9, 4676-4686.	5.4	19
11	Twoâ€stage DSVMâ€based torque ripple minimisation technique for the predictive torque control of the induction motor. IET Electric Power Applications, 2021, 15, 1411.	1.8	0
12	Magnetic Model Identification of Wound Rotor Synchronous Machine Using a Novel Flux Estimator. IEEE Transactions on Industry Applications, 2021, 57, 5389-5399.	4.9	9
13	FCS-MPC Based Pre-Filtering Stage for Computational Efficiency in a Flying Capacitor Converter. IEEE Access, 2021, 9, 111039-111049.	4.2	14
14	A Remedial Control for Short-Circuit Fault in NPC/H-Bridge Inverters without Redundant Component. Electronics (Switzerland), 2021, 10, 2411.	3.1	2
15	Sensorless Predictive Control of Flux Angle for Induction Motors to Improve Efficiency in Light Loads. , 2021, , .		0
16	A fixed switching frequency predictive torque control scheme for induction motors based on discrete space vector modulation. Electrical Engineering, 2020, 102, 845-857.	2.0	2
17	Comprehensive Online Parameters Identification of Wound Rotor Synchronous Machine (WRSM) by Proposing Two New Parameters and Using Kalman Observer. , 2020, , .		2
18	Current shaping of permanent magnet synchronous motor with non-sinusoidal flux distribution for torque ripple reduction using model based predictive control. , 2020, , .		1

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19	Capacitor Voltage Imbalance Reduction in Flying Capacitor Modular Multilevel Converters by using Model Predictive Control. , 2020, , .		5
20	Switching frequency reduction technique for DSVMâ€based predictive torque control of induction motor. IET Electric Power Applications, 2020, 14, 1370-1380.	1.8	1
21	Over-modulation Method of Modulated Model Predictive Control for Matrix Converters. , 2020, , .		2
22	A Hybrid Control Method Based on Model Predictive Control for Controlling the Rectifier Stage of Power Electronic Transformers. , 2019, , .		1
23	Predictive Control of Flux Angle for Induction Motors. , 2019, , .		1
24	Review of model predictive control strategies for matrix converters. IET Power Electronics, 2019, 12, 3021-3032.	2.1	45
25	Predictive Torque Control Implementation for Induction Motors Based on Discrete Space Vector Modulation. IEEE Transactions on Industrial Electronics, 2018, 65, 6881-6889.	7.9	77
26	Direct power control of AFE rectifier by line voltage sensorless predictive technique and MRAS inductance estimator. , 2018, , .		1
27	Simplified Finite Control Set-Model Predictive Control for Matrix Converter-Fed PMSM Drives. IEEE Transactions on Power Electronics, 2018, 33, 2438-2446.	7.9	149
28	Predictive Speed Control with Reduced Commutations and High Dynamic Responses. , 2018, , .		1
29	Finite Control Set Model Predictive Torque Control of Induction Machine With a Robust Adaptive Observer. IEEE Transactions on Industrial Electronics, 2017, 64, 2631-2641.	7.9	90
30	A Computationally Efficient Lookup Table Based FCS-MPC for PMSM Drives Fed by Matrix Converters. IEEE Transactions on Industrial Electronics, 2017, 64, 7645-7654.	7.9	79
31	An Experimental Evaluation of Predictive Current Control and Predictive Torque Control for a PMSM Fed by a Matrix Converter. IEEE Transactions on Industrial Electronics, 2017, 64, 8459-8471.	7.9	60
32	Fuzzy logic based MPPT for a Wind Energy Conversion System using Sliding Mode Control. , 2017, , .		8
33	Predictive control of multi-input switched-capacitor DC-DC converter with reduced switching Frequency. , 2017, , .		10
34	Elimination of position sensor in direct torque control of brushless trapezoidal axial flux synchronous motor. , 2017, , .		0
35	Predictive control of permanent magnet synchronous motor with nonâ€sinusoidal flux distribution for torque ripple minimisation using the recursive least square identification method. IET Electric Power Applications, 2017, 11, 847-856.	1.8	27
36	Hybrid exploration state for the simplified finite control setâ€model predictive control with a deadbeat solution for reducing the current ripple in permanent magnet synchronous motor. IET Electric Power Applications, 2017, 11, 823-835.	1.8	8

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37	Torque Ripple Reduction of Predictive Torque Control for PMSM Drives With Parameter Mismatch. IEEE Transactions on Power Electronics, 2017, 32, 7160-7168.	7.9	125
38	A wind speed sensorless MPPT-pitch angle control scheme for a WECS using integral sliding mode control and neural network. , 2017, , .		2
39	A novel hybrid model-based MPPT algorithm based on artificial neural networks for photovoltaic applications. , 2017, , .		4
40	Finite set model predictive control of a flying capacitor converter with a geometric computational optimization. , 2017, , .		6
41	Simplified model predictive control with variable weighting factor for current ripple reduction. IET Power Electronics, 2017, 10, 1165-1174.	2.1	25
42	Application of multiband hysteresis modulation in field oriented control based IPMSM drive fed by asymetrical multilevel cascaded H-Bridge inverter. , 2016, , .		2
43	Using Extended Kalman Filter and Adaptive Filter for sensorles predictive torque control of PM-Assissted Synchronous Reluctance Motor. , 2016, , .		4
44	A new hardware device to simulate the movement of electric train wheel on rail. , 2016, , .		1
45	Robustness Improvement of Predictive Current Control Using Prediction Error Correction for Permanent-Magnet Synchronous Machines. IEEE Transactions on Industrial Electronics, 2016, 63, 3458-3466.	7.9	187
46	Predictive Slip Control for Electrical Trains. IEEE Transactions on Industrial Electronics, 2016, 63, 3446-3457.	7.9	36
47	Artificial neural networkâ€based fault diagnosis in the ACâ€“DC converter of the power supply of series hybrid electric vehicle. IET Electrical Systems in Transportation, 2016, 6, 96-106.	2.4	39
48	Control of three phase PWM rectifier using virtual fluxâ€based predictive direct power control and SVM under harmonic conditions. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2016, 29, 205-221.	1.9	5
49	Dead beat control of three phase PWM rectifier using virtual flux based Direct Power Control (DPC) and with no line voltage measurements. , 2015, , .		4
50	Permanent synchronous motor predictive deadbeat current control-robustness investigation. , 2015, , .		9
51	Advanced diagnosis based on temperature and current density distributions in a single PEMFC. International Journal of Hydrogen Energy, 2015, 40, 15845-15855.	7.1	33
52	A new switching method for PWM inverter with uniform distribution of output current's spectrum. , 2015, , .		4
53	Multiobjective Fuzzy Predictive Torque Control of an induction motor drive. , 2015, , .		15
54	Derivation of AC small signal model and analysis of trans Z-source inverter. , 2015, , .		3

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55	Power quality improvement using nonlinear-load compensation capability of variable speed DFIG based on DPC-SVM method. , 2014, , .		9
56	Modeling of wheel and rail slip and demonstration of the benefit of maximum adhesion control in train propulsion system. , 2014, , .		5
57	A practical method for calculation of over-excited region in the synchronous generator capability curves. , 2014, , .		7
58	An Encoderless Predictive Torque Control for an Induction Machine With a Revised Prediction Model and EFOSMO. IEEE Transactions on Industrial Electronics, 2014, 61, 6635-6644.	7.9	79
59	Using predictive control and q-ZSI to drive an induction motor supplied by a PV generator. , 2014, , .		3
60	Virtual flux based Direct Power Control (DPC) of three phase PWM rectifier using Model Predictive Control (MPC) and Space Vector Modulation (SVM). , 2014, , .		10
61	Highâ€performance doubly fed induction machine drive system using predictive direct torque control drive system fed by indirect matrix converters. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2014, 27, 34-49.	1.9	2
62	Direct Power Control of three phase PWM rectifier using Model Predictive Control and SVM switching. , 2013, , .		19
63	Application of trans Z-source inverter in photovoltaic systems. , 2013, , .		6
64	Predictive torque control of induction motor based on improved fuzzy control method. , 2013, , .		8
65	Robust sensorless predictive control of induction motors with sliding mode voltage model observer. Turkish Journal of Electrical Engineering and Computer Sciences, 2013, 21, 1539-1552.	1.4	10
66	Using a weighting factor table for FCS-MPC of induction motors with extended prediction horizon. , 2012, , .		17
67	Using Full Order and Reduced Order Observers for Robust Sensorless Predictive Torque Control of Induction Motors. IEEE Transactions on Power Electronics, 2012, 27, 3424-3433.	7.9	158
68	An Improved FCSâ€“MPC Algorithm for an Induction Motor With an Imposed Optimized Weighting Factor. IEEE Transactions on Power Electronics, 2012, 27, 1540-1551.	7.9	358
69	Robust sliding mode voltage model observer for sensorless PTC of induction motors. , 2012, , .		11
70	Inherent FCS-Model predictive torque control for induction machine without Encoder. , 2012, , .		2
71	Speed-independent FCS-model predictive torque control for IM based on SMO. , 2012, , .		3
72	Design and simulation of a PWM rectifier connected to a PM generator of micro turbine unit. Scientia Iranica, 2012, 19, 820-828.	0.4	24

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73	Decoupled Stator Flux Oriented Control for induction motor Fed by Indirect Matrix Converter. , 2012, , .		0
74	Software-Based Resolver-to-Digital Converter for DSP-Based Drives Using an Improved Angle-Tracking Observer. IEEE Transactions on Instrumentation and Measurement, 2012, 61, 922-929.	4.7	88
75	Sensorless Predictive Torque Control of induction motor by means of reduced order observer. , 2011, , .		3
76	A comparative study of DTC-SVM with three-level inverter and an improved predictive torque control using two-level inverter. , 2011, , .		4
77	Sensorless model predictive torque control for induction machine by using the sliding mode full-order observer. , 2011, , .		3
78	A new approach to DTC-ISVM for induction motor drive system fed by indirect matrix converter. , 2011, , .		7
79	A new method for minimizing of voltage stress across devices in Z-source inverter. , 2011, , .		4
80	Torque ripple reduction in direct torque control of induction machines by use of all voltage vectors of matrix converters. , 2010, , .		1
81	Sensorless predictive torque control by means of sliding mode observer. , 2008, , .		15
82	Optimal vector control of permanent magnet synchronous motor. , 2008, , .		10
83	An Extended Horizon Model Predictive Torque Control with Computationally Efficient Implementation for PMSM Drives. International Journal of Control, 0, , 1-38.	1.9	1