

Mohamed Trabelsi

List of Publications by Year in descending order

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110
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docs citations

112
times ranked

1636
citing authors

#	ARTICLE	IF	CITATIONS
1	Virtual current vector-based method for inverter open-switch and open-phase fault diagnosis in multiphase permanent magnet synchronous motor drives. IET Electric Power Applications, 2022, 16, 1476-1491.	1.8	4
2	Enhanced Deadbeat Control Approach for Grid-Tied Multilevel Flying Capacitors Inverter. IEEE Access, 2022, 10, 16720-16728.	4.2	6
3	A Lyapunov-Based Model Predictive Control Design With Reduced Sensors for a PUC7 Rectifier. IEEE Transactions on Industrial Electronics, 2021, 68, 1139-1147.	7.9	35
4	A novel stacked generalization ensemble-based hybrid LGBM-XGB-MLP model for Short-Term Load Forecasting. Energy, 2021, 214, 118874.	8.8	179
5	Packed U-Cell topology: Structure, control, and challenges. , 2021, , 111-145.		1
6	Deep Learning-Based Fault Diagnosis of Photovoltaic Systems: A Comprehensive Review and Enhancement Prospects. IEEE Access, 2021, 9, 126286-126306.	4.2	57
7	Review on Single-DC-Source Multilevel Inverters: Topologies, Challenges, Industrial Applications, and Recommendations. IEEE Open Journal of the Industrial Electronics Society, 2021, 2, 112-127.	6.8	74
8	Second-order SMO-based sensorless control of IM drive: experimental investigations of observer sensitivity and system reconfiguration in postfault operation mode. IET Electric Power Applications, 2021, 15, 811-823.	1.8	0
9	Efficient design approach of triple notched UWB filter. AEU - International Journal of Electronics and Communications, 2021, 131, 153619.	2.9	7
10	Reduced GPR based RF Approach for Fault Diagnosis of Wind Energy Conversion Systems. , 2021, , .		0
11	Effective Random Forest-Based Fault Detection and Diagnosis for Wind Energy Conversion Systems. IEEE Sensors Journal, 2021, 21, 6914-6921.	4.7	45
12	Enhanced RF for Fault Detection and Diagnosis of Uncertain PV systems. , 2021, , .		3
13	Random forest-based nonlinear improved feature extraction and selection for fault classification. , 2021, , .		1
14	MRAS-Based Switching Linear Feedback Strategy for Sensorless Speed Control of Induction Motor Drives. Energies, 2021, 14, 3083.	3.1	6
15	An Effective Sliding Mode PWM Control for The PUC5 Inverter. , 2021, , .		0
16	Reduced Gaussian process regression based random forest approach for fault diagnosis of wind energy conversion systems. IET Renewable Power Generation, 2021, 15, 3612-3621.	3.1	11
17	Enhanced Random Forest Model for Robust Short-Term Photovoltaic Power Forecasting Using Weather Measurements. Energies, 2021, 14, 3992.	3.1	13
18	Real-Time Implementation of an Optimized Model Predictive Control for a 9-Level CSC Inverter in Grid-Connected Mode. Sustainability, 2021, 13, 8119.	3.2	11

#	ARTICLE	IF	CITATIONS
19	An Effective Hybrid NARX-LSTM Model for Point and Interval PV Power Forecasting. IEEE Access, 2021, 9, 36571-36588.	4.2	66
20	A Hybrid Fault Detection and Diagnosis of Grid-Tied PV Systems: Enhanced Random Forest Classifier Using Data Reduction and Interval-Valued Representation. IEEE Access, 2021, 9, 64267-64277.	4.2	21
21	Enhanced Deep Belief Network Based on Ensemble Learning and Tree-Structured of Parzen Estimators: An Optimal Photovoltaic Power Forecasting Method. IEEE Access, 2021, 9, 150330-150344.	4.2	21
22	An Effective Sliding Mode Control Design for a Grid-Connected PUC7 Multilevel Inverter. IEEE Transactions on Industrial Electronics, 2020, 67, 3717-3725.	7.9	46
23	Reduced Kernel Random Forest Technique for Fault Detection and Classification in Grid-Tied PV Systems. IEEE Journal of Photovoltaics, 2020, 10, 1864-1871.	2.5	70
24	Interval-Valued Features Based Machine Learning Technique for Fault Detection and Diagnosis of Uncertain HVAC Systems. IEEE Access, 2020, 8, 171892-171902.	4.2	15
25	Short-Term Electric Load Forecasting Based on Data-Driven Deep Learning Techniques. , 2020, , .		12
26	A Novel Fault Diagnosis of Uncertain Systems Based on Interval Gaussian Process Regression: Application to Wind Energy Conversion Systems. IEEE Access, 2020, 8, 219672-219679.	4.2	17
27	Artificial Intelligence-Based Weighting Factor Autotuning for Model Predictive Control of Grid-Tied Packed U-Cell Inverter. Energies, 2020, 13, 3107.	3.1	22
28	Inverter fault diagnosis of an electrical seriesâ€connected two sinusoidal sixâ€phase permanent magnet machines drive. IET Electric Power Applications, 2020, 14, 1412-1420.	1.8	1
29	Average Model-Based Feedforward and Feedback Control for PUC5 Inverter. IEEE Access, 2020, 8, 172962-172971.	4.2	7
30	An Effective Super-Twisting Control of a Standalone PUC5 Inverter. , 2020, , .		0
31	Design Considerations of Five-Phase Machine With Double p/3p Polarity. IEEE Transactions on Energy Conversion, 2019, 34, 12-24.	5.2	29
32	Model Predictive Control for a PUC5 based Dual Output Active Rectifier. , 2019, , .		3
33	Machine Learning-Based Statistical Hypothesis Testing for Fault Detection. , 2019, , .		6
34	3-D Multi-Nodal Thermal Modelling for Fault-Tolerant Machine. , 2019, , .		3
35	Mixed modelâ€based and signalâ€based approach for openâ€switches fault diagnostic in sensorless speed vector controlled induction motor drive using sliding mode observer. IET Power Electronics, 2019, 12, 1149-1159.	2.1	34
36	Hardware in the Loop Simulation of a Nano-Grid Transactive Energy Exchange. , 2019, , .		1

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37	Performance Evaluation of Deep Recurrent Neural Networks Architectures: Application to PV Power Forecasting. , 2019, , .		18
38	Model Predictive Control of a 9- Level Packed U-Cells based Grid-Connected PV System. , 2019, , .		5
39	Average Model based Effective Control Approach for a Grid-Connected PV PUC5 Inverter. , 2019, , .		0
40	Nonlinear Hammerstein-Wiener Model based Fault Detection Approach for a Grid-Connected Cascaded H-Bridge Inverter. , 2019, , .		1
41	Medium and Long-Term Parametric Temperature Forecasting using Real Meteorological Data. , 2019, , .		4
42	A Simple Sliding Mode Controller for PUC7 Grid-Connected Inverter Using A look-up Table. , 2019, , .		3
43	Three-Phase Two-Leg T-Type Converter based Active Power Filter. , 2019, , .		0
44	Self-Balanced Operation of a Standalone PUC5 Multilevel Inverter Based on its Averaged Model. , 2019, , .		5
45	Experimental Investigation of Inverter Open-Circuit Fault Diagnosis for Biharmonic Five-Phase Permanent Magnet Drive. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2018, 6, 339-351.	5.4	38
46	Dynamic Gains Robust Differentiator Based Fault Detection Approach for Cascaded H-Bridge Multilevel Inverters. , 2018, , .		6
47	Fault Diagnosis and Fault Tolerant Control of a Three-Phase VSI Supplying Sensorless Speed Controlled Induction Motor Drive. Electric Power Components and Systems, 2018, 46, 2159-2173.	1.8	15
48	Robust sliding mode control for three-phase rectifier supplied by non-ideal voltage. Control Engineering Practice, 2018, 77, 73-85.	5.5	9
49	Model predictive control of packed U cells based transformerless single-phase dynamic voltage restorer. , 2018, , .		16
50	Mitigation of grid voltage disturbances using quasi-Z-source based dynamic voltage restorer. , 2018, , .		5
51	An effective statistical fault detection technique for grid connected photovoltaic systems based on an improved generalized likelihood ratio test. Energy, 2018, 159, 842-856.	8.8	44
52	Enhanced generalized likelihood ratio test for failure detection in photovoltaic systems. International Transactions on Electrical Energy Systems, 2018, 28, e2640.	1.9	11
53	Reliability evaluation of smart grid system with large penetration of distributed energy resources. , 2018, , .		13
54	Low Complexity Model Predictive Control of PUC5 Based Dynamic Voltage Restorer. , 2018, , .		14

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55	Open-Circuit Fault Diagnosis and Fault-Tolerant Model Predictive Control of SubMultilevel Inverter. , 2018, , .		4
56	Model predictive control with non-linear feedback for permanent magnet synchronous motor drives. , 2018, , .		1
57	Comparison and analysis of post-fault operation modes in a five-phase PMSM considering thermal behavior. , 2018, , .		3
58	Marine Current Turbine System Post-Fault Behavior under an Open Circuit Fault. Advances in Electrical and Electronic Engineering, 2018, 16, .	0.3	0
59	Efficient UWB low noise amplifier with high out of band interference cancellation. IET Microwaves, Antennas and Propagation, 2017, 11, 98-105.	1.4	13
60	Modeling and Simulation of a PMSG-based Marine Current Turbine System under Faulty Rectifier Conditions. Electric Power Components and Systems, 2017, 45, 715-725.	1.8	14
61	Performance enhancement of cascaded qZS-HB based renewable energy system using Model Predictive Control. International Journal of Hydrogen Energy, 2017, 42, 17917-17927.	7.1	3
62	Investigation into the effect of unbalanced supply voltage on detection of stator winding turn fault in PMSM. , 2017, , .		6
63	Multiple criteria for high performance real-time diagnostic of single and multiple open-switch faults in ac-motor drives: Application to IGBT-based voltage source inverter. Electric Power Systems Research, 2017, 144, 136-149.	3.6	40
64	An original observer design for reduced sensor control of Packed U Cells based renewable energy system. International Journal of Hydrogen Energy, 2017, 42, 17910-17916.	7.1	12
65	Enhanced low-voltage ride-through capability of flying capacitors inverter using model predictive control. International Transactions on Electrical Energy Systems, 2017, 27, e2430.	1.9	2
66	Finite-Control-Set Model-Predictive Control for a Quasi-Z-Source Four-Leg Inverter Under Unbalanced Load Condition. IEEE Transactions on Industrial Electronics, 2017, 64, 2560-2569.	7.9	105
67	Flux weakening control of PMSG based on direct wave energy converter systems. , 2017, , .		0
68	Five-phase Bi-harmonic PMSM control under voltage and currents limits. , 2017, , .		0
69	Overview of double-line-frequency power decoupling techniques for single-phase Z-Source/Quasi-Z-Source inverter. , 2017, , .		10
70	Model predictive control based current ripple damping in single-phase quasi-impedance-source inverter. , 2017, , .		1
71	Inverter open circuit faults diagnosis in series-connected six-phases permanent magnet drive. , 2017, , .		4
72	High performance voltage-sensorless model predictive control for grid integration of packed U cells based PV system. , 2017, , .		9

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73	Compact ultra-wideband bandpass filter with notch band based on the impedance matching method. Microwave and Optical Technology Letters, 2016, 58, 2176-2178.	1.4	1
74	Open-switch and open-phase real time FDI process for multiphase PM Synchronous Motors. , 2016, , .		7
75	An interconnected observer for modular multilevel converter. , 2016, , .		10
76	A five-level neutral-point-clamped/H-Bridge quasi-impedance source inverter for grid connected PV system. , 2016, , .		13
77	Faults effects analysis in a photovoltaic array based on current-voltage and power-voltage characteristics. , 2016, , .		5
78	An effective fault detection technique for a quasi-Z-Source based grid-tied PV system. , 2016, , .		5
79	Circuit Modeling and EM Simulation Verification of DGS based Low-Pass Filter Employing Transmission Line Model along with Microstrip-Slotline Transitions. MATEC Web of Conferences, 2016, 52, 01003.	0.2	3
80	A Model Predictive Control technique for utility-scale grid connected battery systems using packed U cells multilevel inverter. , 2016, , .		16
81	A sliding mode observer for inverter open-switch fault diagnostic in sensorless induction motor drive. , 2016, , .		14
82	An effective Model Predictive Control for grid connected Packed U Cells multilevel inverter. , 2016, , .		27
83	Real-Time Switches Fault Diagnosis Based on Typical Operating Characteristics of Five-Phase Permanent Magnetic Synchronous Machines. IEEE Transactions on Industrial Electronics, 2016, , 1-1.	7.9	60
84	Finite-Control-Set Model Predictive Control for Grid-Connected Packed-U-Cells Multilevel Inverter. IEEE Transactions on Industrial Electronics, 2016, 63, 7286-7295.	7.9	144
85	New design method of the single stage distributed amplifier. Microelectronics Journal, 2016, 52, 111-116.	2.0	2
86	Robust Adaptive Observer-Based Model Predictive Control for Multilevel Flying Capacitors Inverter. IEEE Transactions on Industrial Electronics, 2016, 63, 7876-7886.	7.9	44
87	Model predictive control of three-phase three-level Neutral-Point-Clamped qZS inverter. , 2016, , .		8
88	Open Switch Fault effects analysis in five-phase PMSM designed for aerospace application. , 2016, , .		10
89	Multi-objective model predictive control for grid-tied 15-level packed U cells inverter. , 2016, , .		8
90	Lowpass filter design technique for hybrid and monolithic implementation. , 2016, , .		0

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91	Finite control set model predictive control for grid-tied quasi-Z-source based multilevel inverter. , 2016, , .		4
92	1-MW quasi-Z-source based multilevel PV energy conversion system. , 2016, , .		25
93	Model Predictive Control of Z-Source four-leg inverter for standalone Photovoltaic system with unbalanced load. , 2016, , .		18
94	Modular Multilevel Converter Circulating Current Reduction Using Model Predictive Control. IEEE Transactions on Industrial Electronics, 2016, 63, 3857-3866.	7.9	116
95	New Fault-Tolerant Control Approach for a Reconfigurable Grid-Connected PV System. , 2016, , .		0
96	Numerical Determination of Permittivity and Permeability Tensors of a Dielectric Metamaterial Composed of an Infinite Number of Split Ring Resonators. Wireless Personal Communications, 2015, 83, 2925-2947.	2.7	2
97	A Novel Design Method for Compact UWB Bandpass Filters. IEEE Microwave and Wireless Components Letters, 2015, 25, 4-6.	3.2	56
98	RF and non-linearity characterization of porous silicon layer for RF-ICs. , 2014, , .		2
99	A 0.9 V low power reconfigurable CMOS folded cascode LNA for multi-standard wireless applications. , 2014, , .		1
100	Sensorless speed control of VSI-FED induction motor drive under IGBT open-switch damage: Performances and fault tolerant analysis. , 2014, , .		3
101	A frequency reconfigurable antenna for high performance U-NII band radios. , 2014, , .		1
102	Ultra low power and high gain switched CMOS  overflow="scroll" xmlns:xocs="http://www.elsevier.com/xml/xocs/dtd" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.elsevier.com/xml/ja/dtd" xmlns:ja="http://www.elsevier.com/xml/ja/dtd" xmlns:mml="http://www.w3.org/1998/Math/MathML" xmlns:tb="http://www.elsevier.com/xml/common/table/dtd" xmlns:sb="http://www.elsevier.com/xml/common/struct-bib/dtd" xmlns:ce="http://ww.elsevier.com/xml/common/struct-bib/dtd"/> Microelectroni	2.0	5
103	A Selective Frequency-Reconfigurable Antenna for Cognitive Radio Applications. IEEE Antennas and Wireless Propagation Letters, 2014, 13, 515-518.	4.0	126
104	Low power and high linear reconfigurable CMOS LNA for multi-standard wireless applications. , 2013, , .		12
105	An adaptive hysteresis dead-band-based SVPWM method for multi-level inverter. International Journal of Power Electronics, 2013, 5, 280.	0.2	0
106	A 0.9 V high gain and high linear bleeding CMOS mixer for wireless applications. , 2012, , .		2
107	PWM-Switching pattern-based diagnosis scheme for single and multiple open-switch damages in VSI-fed induction motor drives. ISA Transactions, 2012, 51, 333-344.	5.7	104
108	Deadbeat control with multi-sampling compensation for medium-voltage motor drives by cascaded multi-cell inverter using FPGA based hardware controller. , 2011, , .		3

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109	Real Time Digital Feedback Control for VFD fed by Cascaded Multi-cell inverter. , 2010, , .		11
110	Analysis of a bilateral distributed amplifier using scattering parameters. Microwave and Optical Technology Letters, 2003, 36, 120-122.	1.4	0