

Mohamed Trabelsi

List of Publications by Year in descending order

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110
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112
docs citations

112
times ranked

1636
citing authors

#	ARTICLE	IF	CITATIONS
1	A novel stacked generalization ensemble-based hybrid LGBM-XGB-MLP model for Short-Term Load Forecasting. <i>Energy</i> , 2021, 214, 118874.	8.8	179
2	Finite-Control-Set Model Predictive Control for Grid-Connected Packed-U-Cells Multilevel Inverter. <i>IEEE Transactions on Industrial Electronics</i> , 2016, 63, 7286-7295.	7.9	144
3	A Selective Frequency-Reconfigurable Antenna for Cognitive Radio Applications. <i>IEEE Antennas and Wireless Propagation Letters</i> , 2014, 13, 515-518.	4.0	126
4	Modular Multilevel Converter Circulating Current Reduction Using Model Predictive Control. <i>IEEE Transactions on Industrial Electronics</i> , 2016, 63, 3857-3866.	7.9	116
5	Finite-Control-Set Model-Predictive Control for a Quasi-Z-Source Four-Leg Inverter Under Unbalanced Load Condition. <i>IEEE Transactions on Industrial Electronics</i> , 2017, 64, 2560-2569.	7.9	105
6	PWM-Switching pattern-based diagnosis scheme for single and multiple open-switch damages in VSI-fed induction motor drives. <i>ISA Transactions</i> , 2012, 51, 333-344.	5.7	104
7	Review on Single-DC-Source Multilevel Inverters: Topologies, Challenges, Industrial Applications, and Recommendations. <i>IEEE Open Journal of the Industrial Electronics Society</i> , 2021, 2, 112-127.	6.8	74
8	Reduced Kernel Random Forest Technique for Fault Detection and Classification in Grid-Tied PV Systems. <i>IEEE Journal of Photovoltaics</i> , 2020, 10, 1864-1871.	2.5	70
9	An Effective Hybrid NARX-LSTM Model for Point and Interval PV Power Forecasting. <i>IEEE Access</i> , 2021, 9, 36571-36588.	4.2	66
10	Real-Time Switches Fault Diagnosis Based on Typical Operating Characteristics of Five-Phase Permanent Magnetic Synchronous Machines. <i>IEEE Transactions on Industrial Electronics</i> , 2016, , 1-1.	7.9	60
11	Deep Learning-Based Fault Diagnosis of Photovoltaic Systems: A Comprehensive Review and Enhancement Prospects. <i>IEEE Access</i> , 2021, 9, 126286-126306.	4.2	57
12	A Novel Design Method for Compact UWB Bandpass Filters. <i>IEEE Microwave and Wireless Components Letters</i> , 2015, 25, 4-6.	3.2	56
13	An Effective Sliding Mode Control Design for a Grid-Connected PUC7 Multilevel Inverter. <i>IEEE Transactions on Industrial Electronics</i> , 2020, 67, 3717-3725.	7.9	46
14	Effective Random Forest-Based Fault Detection and Diagnosis for Wind Energy Conversion Systems. <i>IEEE Sensors Journal</i> , 2021, 21, 6914-6921.	4.7	45
15	Robust Adaptive Observer-Based Model Predictive Control for Multilevel Flying Capacitors Inverter. <i>IEEE Transactions on Industrial Electronics</i> , 2016, 63, 7876-7886.	7.9	44
16	An effective statistical fault detection technique for grid connected photovoltaic systems based on an improved generalized likelihood ratio test. <i>Energy</i> , 2018, 159, 842-856.	8.8	44
17	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. <i>Electric Power Systems Research</i> , 2017, 144, 136-149.	3.6	40
18	Experimental Investigation of Inverter Open-Circuit Fault Diagnosis for Biharmonic Five-Phase Permanent Magnet Drive. <i>IEEE Journal of Emerging and Selected Topics in Power Electronics</i> , 2018, 6, 339-351.	5.4	38

#	ARTICLE	IF	CITATIONS
19	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
20	Mixed model-based and signal-based approach for open-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
21	Design Considerations of Five-Phase Machine With Double p/3p Polarity. IEEE Transactions on Energy Conversion, 2019, 34, 12-24.	5.2	29
22	An effective Model Predictive Control for grid connected Packed U Cells multilevel inverter. , 2016, , .		27
23	1-MW quasi-Z-source based multilevel PV energy conversion system. , 2016, , .		25
24	Artificial Intelligence-Based Weighting Factor Autotuning for Model Predictive Control of Grid-Tied Packed U-Cell Inverter. Energies, 2020, 13, 3107.	3.1	22
25	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
26	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
27	Model Predictive Control of Z-Source four-leg inverter for standalone Photovoltaic system with unbalanced load. , 2016, , .		18
28	Performance Evaluation of Deep Recurrent Neural Networks Architectures: Application to PV Power Forecasting. , 2019, , .		18
29	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
30	A Model Predictive Control technique for utility-scale grid connected battery systems using packed U cells multilevel inverter. , 2016, , .		16
31	Model predictive control of packed U cells based transformerless single-phase dynamic voltage restorer. , 2018, , .		16
32	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
33	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
34	A sliding mode observer for inverter open-switch fault diagnostic in sensorless induction motor drive. , 2016, , .		14
35	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
36	Low Complexity Model Predictive Control of PUC5 Based Dynamic Voltage Restorer. , 2018, , .		14

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37	A five-level neutral-point-clamped/H-Bridge quasi-impedance source inverter for grid connected PV system. , 2016, , .		13
38	Efficient UWB low noise amplifier with high out of band interference cancellation. IET Microwaves, Antennas and Propagation, 2017, 11, 98-105.	1.4	13
39	Reliability evaluation of smart grid system with large penetration of distributed energy resources. , 2018, , .		13
40	Enhanced Random Forest Model for Robust Short-Term Photovoltaic Power Forecasting Using Weather Measurements. Energies, 2021, 14, 3992.	3.1	13
41	Low power and high linear reconfigurable CMOS LNA for multi-standard wireless applications. , 2013, , .		12
42	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
43	Short-Term Electric Load Forecasting Based on Data-Driven Deep Learning Techniques. , 2020, , .		12
44	Real Time Digital Feedback Control for VFD fed by Cascaded Multi-cell inverter. , 2010, , .		11
45	Enhanced generalized likelihood ratio test for failure detection in photovoltaic systems. International Transactions on Electrical Energy Systems, 2018, 28, e2640.	1.9	11
46	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
47	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
48	An interconnected observer for modular multilevel converter. , 2016, , .		10
49	Open Switch Fault effects analysis in five-phase PMSM designed for aerospace application. , 2016, , .		10
50	Overview of double-line-frequency power decoupling techniques for single-phase Z-Source/Quasi-Z-Source inverter. , 2017, , .		10
51	High performance voltage-sensorless model predictive control for grid integration of packed U cells based PV system. , 2017, , .		9
52	Robust sliding mode control for three-phase rectifier supplied by non-ideal voltage. Control Engineering Practice, 2018, 77, 73-85.	5.5	9
53	Model predictive control of three-phase three-level Neutral-Point-Clamped qZS inverter. , 2016, , .		8
54	Multi-objective model predictive control for grid-tied 15-level packed U cells inverter. , 2016, , .		8

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55	Open-switch and open-phase real time FDI process for multiphase PM Synchronous Motors. , 2016, , .		7
56	Efficient design approach of triple notched UWB filter. AEU - International Journal of Electronics and Communications, 2021, 131, 153619.	2.9	7
57	Average Model-Based Feedforward and Feedback Control for PUC5 Inverter. IEEE Access, 2020, 8, 172962-172971.	4.2	7
58	Investigation into the effect of unbalanced supply voltage on detection of stator winding turn fault in PMSM. , 2017, , .		6
59	Dynamic Gains Robust Differentiator Based Fault Detection Approach for Cascaded H-Bridge Multilevel Inverters. , 2018, , .		6
60	Machine Learning-Based Statistical Hypothesis Testing for Fault Detection. , 2019, , .		6
61	MRAS-Based Switching Linear Feedback Strategy for Sensorless Speed Control of Induction Motor Drives. Energies, 2021, 14, 3083.	3.1	6
62	Enhanced Deadbeat Control Approach for Grid-Tied Multilevel Flying Capacitors Inverter. IEEE Access, 2022, 10, 16720-16728.	4.2	6
63	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:tbl_struct="http://www.elsevier.com/xml/common/struct-bib/dtd" xmlns:ec="http://www.elsevier.com/xml/common/struct-bib/dtd" data-bbox="82 462 982 510"/> Faults effects analysis in a photovoltaic array based on current-voltage and power-voltage characteristics. , 2016, , .	2.0	5
64	Faults effects analysis in a photovoltaic array based on current-voltage and power-voltage characteristics. , 2016, , .		5
65	An effective fault detection technique for a quasi-Z-Source based grid-tied PV system. , 2016, , .		5
66	Mitigation of grid voltage disturbances using quasi-Z-source based dynamic voltage restorer. , 2018, , .		5
67	Model Predictive Control of a 9- Level Packed U-Cells based Grid-Connected PV System. , 2019, , .		5
68	Self-Balanced Operation of a Standalone PUC5 Multilevel Inverter Based on its Averaged Model. , 2019, , .		5
69	Finite control set model predictive control for grid-tied quasi-Z-source based multilevel inverter. , 2016, , .		4
70	Inverter open circuit faults diagnosis in series-connected six-phases permanent magnet drive. , 2017, , .		4
71	Open-Circuit Fault Diagnosis and Fault- Tolerant Model Predictive Control of SubMultilevel Inverter. , 2018, , .		4
72	Medium and Long-Term Parametric Temperature Forecasting using Real Meteorological Data. , 2019, , .		4

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73	Virtual current vectorâ€based method for inverter openâ€switch and openâ€phase fault diagnosis in multiphase permanent magnet synchronous motor drives. IET Electric Power Applications, 2022, 16, 1476-1491.	1.8	4
74	Deadbeat control with multi-sampling compensation for medium-voltage motor drives by cascaded multi-cell inverter using FPGA based hardware controller. , 2011, , .		3
75	Sensorless speed control of VSI-FED induction motor drive under IGBT open-switch damage: Performances and fault tolerant analysis. , 2014, , .		3
76	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
77	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
78	Comparison and analysis of post-fault operation modes in a five-phase PMSM considering thermal behavior. , 2018, , .		3
79	Model Predictive Control for a PUC5 based Dual Output Active Rectifier. , 2019, , .		3
80	3-D Multi-Nodal Thermal Modelling for Fault-Tolerant Machine. , 2019, , .		3
81	A Simple Sliding Mode Controller for PUC7 Grid-Connected Inverter Using A look-up Table. , 2019, , .		3
82	Enhanced RF for Fault Detection and Diagnosis of Uncertain PV systems. , 2021, , .		3
83	A 0.9 V high gain and high linear bleeding CMOS mixer for wireless applications. , 2012, , .		2
84	RF and non-linearity characterization of porous silicon layer for RF-ICs. , 2014, , .		2
85	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
86	New design method of the single stage distributed amplifier. Microelectronics Journal, 2016, 52, 111-116.	2.0	2
87	Enhanced lowâ€voltage rideâ€through capability of flying capacitors inverter using model predictive control. International Transactions on Electrical Energy Systems, 2017, 27, e2430.	1.9	2
88	A 0.9 V low power reconfigurable CMOS folded cascode LNA for multi-standard wireless applications. , 2014, , .		1
89	A frequency reconfigurable antenna for high performance U-NII band radios. , 2014, , .		1
90	Compact ultraâ€wideband bandpass filter with notch band based on the impedance matching method. Microwave and Optical Technology Letters, 2016, 58, 2176-2178.	1.4	1

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91	Model predictive control based current ripple damping in single-phase quasi-impedance-source inverter. , 2017, , .		1
92	Model predictive control with non-linear feedback for permanent magnet synchronous motor drives. , 2018, , .		1
93	Hardware in the Loop Simulation of a Nano-Grid Transactive Energy Exchange. , 2019, , .		1
94	Nonlinear Hammerstein-Wiener Model based Fault Detection Approach for a Grid-Connected Cascaded H-Bridge Inverter. , 2019, , .		1
95	Packed U-Cell topology: Structure, control, and challenges. , 2021, , 111-145.		1
96	Random forest-based nonlinear improved feature extraction and selection for fault classification. , 2021, , .		1
97	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
98	Analysis of a bilateral distributed amplifier using scattering parameters. Microwave and Optical Technology Letters, 2003, 36, 120-122.	1.4	0
99	An adaptive hysteresis dead-band-based SVPWM method for multi-level inverter. International Journal of Power Electronics, 2013, 5, 280.	0.2	0
100	Lowpass filter design technique for hybrid and monolithic implementation. , 2016, , .		0
101	Flux weakening control of PMSG based on direct wave energy converter systems. , 2017, , .		0
102	Five-phase Bi-harmonic PMSM control under voltage and currents limits. , 2017, , .		0
103	Average Model based Effective Control Approach for a Grid-Connected PV PUC5 Inverter. , 2019, , .		0
104	Three-Phase Two-Leg T-Type Converter based Active Power Filter. , 2019, , .		0
105	Secondâ€order SMOâ€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
106	Reduced GPR based RF Approach for Fault Diagnosis of Wind Energy Conversion Systems. , 2021, , .		0
107	An Effective Sliding Mode PWM Control for The PUC5 Inverter. , 2021, , .		0
108	New Fault-Tolerant Control Approach for a Reconfigurable Grid-Connected PV System. , 2016, , .		0

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109	Marine Current Turbine System Post-Fault Behavior under an Open Circuit Fault. Advances in Electrical and Electronic Engineering, 2018, 16, .	0.3	0
110	An Effective Super-Twisting Control of a Standalone PUC5 Inverter. , 2020, , .		0