Fujin Deng

List of Publications by Year in descending order

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		172386	197736
149	2,994	29	49
papers	citations	h-index	g-index

149	149	149	2246
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Isolation Forest Based Submodule Open-Circuit Fault Localization Method for Modular Multilevel Converters. IEEE Transactions on Industrial Electronics, 2023, 70, 3090-3102.	5.2	14
2	Cascaded Modular Multilevel Converter and Cycloconverter Based Machine Drive System. IEEE Transactions on Industrial Electronics, 2023, 70, 2373-2384.	5.2	5
3	Improved Control Strategy of Triple-Voltage Three-Phase DAB (T²-DAB) Converter for Current Stress and Zero-Voltage-Switching Optimization. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2022, 10, 773-784.	3.7	9
4	A type of piecewise and modular energy storage topology achieved by dual carrier cross phase shift SPWM control. IET Power Electronics, 2022, 15, 463-475.	1.5	2
5	Overmodulation Operation of Hybrid Modular Multilevel Converter With Reduced Energy Storage Requirement. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2022, 10, 2946-2958.	3.7	4
6	Design and analysis of genetic algorithm and BP neural network based PID control for boost converter applied in renewable power generations. IET Renewable Power Generation, 2022, 16, 1336-1344.	1.7	16
7	Submodule Open-Circuit Fault Detection For Modular Multilevel Converters Under Light Load Condition With Rearranged Bleeding Resistor Circuit. IEEE Transactions on Power Electronics, 2022, 37, 4600-4613.	5.4	12
8	Temperature-Balancing Control for Modular Multilevel Converters Under Unbalanced Grid Voltages. IEEE Transactions on Power Electronics, 2022, 37, 4614-4625.	5.4	12
9	Advanced 2N+1 Submodule Unified PWM With Reduced DC-Link Current Ripple for Modular Multilevel Converters. IEEE Transactions on Power Electronics, 2022, 37, 4261-4274.	5.4	5
10	The Modular Current-Fed High-Frequency Isolated Matrix Converters for Wind Energy Conversion. IEEE Transactions on Power Electronics, 2022, 37, 4779-4791.	5.4	17
11	Direct Power Control of Three-Phase Electric Springs. IEEE Transactions on Industrial Electronics, 2022, 69, 13033-13044.	5.2	3
12	Harmonic Optimization Strategy for CPS-PWM Based MMCs Under Submodule Capacitor Voltage Reduction Control. IEEE Transactions on Power Electronics, 2022, 37, 4288-4300.	5.4	8
13	Characteristics of the Superconducting Field Winding of an HTS Wind Turbine Generator During a Short Circuit Fault. IEEE Transactions on Applied Superconductivity, 2022, 32, 1-6.	1.1	2
14	Power Loss Reduction Control for Modular Multilevel Converters Based on Resistor Controllable Submodule. IEEE Transactions on Power Electronics, 2022, 37, 9767-9776.	5.4	3
15	Improved CPS-PWM Approach for Over-Modulation Operations of Hybrid Modular Multilevel Converter. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2022, 10, 5933-5943.	3.7	6
16	Voltage balancing control of hybrid MMC under over-modulation situations with optimal circulating current injection. International Journal of Electrical Power and Energy Systems, 2022, 140, 108053.	3.3	5
17	Capacitor Monitoring for Modular Multilevel Converters Based on Intelligent Algorithm. , 2022, , .		2
18	Optimal DC Electric Spring Planning Based on Intelligent Algorithm. , 2022, , .		0

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19	Sensorless Robust Flatness-Based Control With Nonlinear Observer for Non-Ideal Parallel DCâ€“AC Inverters. IEEE Access, 2022, 10, 53940-53953.	2.6	1
20	A Three-Phase Multiplexing Arm Modular Multilevel Converter With High Power Density and Small Volume. IEEE Transactions on Power Electronics, 2022, 37, 14587-14600.	5.4	6
21	Enhanced Hierarchical Control Framework of Microgrids With Efficiency Improvement andÂThermal Management. IEEE Transactions on Energy Conversion, 2021, 36, 11-22.	3.7	26
22	Efficiency-Prioritized Droop Control Strategy of AC Microgrid. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2021, 9, 2936-2950.	3.7	30
23	Crossing Thyristor Branches-Based Hybrid Modular Multilevel Converters for DC Line Faults. IEEE Transactions on Industrial Electronics, 2021, 68, 9719-9730.	5.2	37
24	Switch Open-Circuit Fault Localization Strategy for MMCs Using Sliding-Time Window Based Features Extraction Algorithm. IEEE Transactions on Industrial Electronics, 2021, 68, 10193-10206.	5.2	27
25	Double Half-Bridge Submodule-Based Modular Multilevel Converters With Reduced Voltage Sensors. IEEE Transactions on Power Electronics, 2021, 36, 3643-3648.	5.4	11
26	Submodule Capacitance Monitoring Strategy for Phase-Shifted Carrier Pulsewidth-Modulation-Based Modular Multilevel Converters. IEEE Transactions on Industrial Electronics, 2021, 68, 8753-8767.	5.2	31
27	One-Step-Prediction Discrete Observer Based Frequency-Locked-Loop Technique for Three-Phase System. IEEE Access, 2021, 9, 95401-95411.	2.6	3
28	Thermal Optimization Strategy Based on Second-Order Harmonic Circulating Current Injection for MMCs. IEEE Access, 2021, 9, 80183-80196.	2.6	7
29	Analysis on boundary conditions of soft switching for DC electric spring with parallel topology. IET Power Electronics, 2021, 14, 2167-2177.	1.5	1
30	Power losses minimization for modular multilevel converter s with secondâ€order and fourthâ€order harmonic circulating current injection. International Transactions on Electrical Energy Systems, 2021, 31, e12962.	1.2	1
31	Parameter Estimator-based Power Control Strategy of Microgrid Considering Nonlinear Inductor. , 2021, , .		1
32	DC-Link High-Frequency Current Ripple Elimination Strategy for MMCs Using Phase-Shifted Double-Group Multicarrier-Based Phase-Disposition PWM. IEEE Transactions on Power Electronics, 2021, 36, 8872-8886.	5.4	14
33	Hybrid Modular Multilevel Converter With Self-Balancing Structure. IEEE Transactions on Industry Applications, 2021, 57, 5039-5051.	3.3	11
34	Improved Harmonic Profile for High-Power PWM Current-Source Converters With Modified Space-Vector Modulation Schemes. IEEE Transactions on Power Electronics, 2021, 36, 11234-11244.	5.4	13
35	Capacitor Voltage Ripple Suppression of Modular Multilevel Converters Based on Improved High-Frequency Injection Method. , 2021, , .		1
36	SM Insertion Time Based Capacitance Monitoring in Modular Multilevel Converters. , 2021, , .		0

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37	Fault Localization Strategy for Modular Multilevel Converters Under Submodule Lower Switch Open-Circuit Fault. IEEE Transactions on Power Electronics, 2020, 35, 5190-5204.	5.4	46
38	Capacitor ESR and C Monitoring in Modular Multilevel Converters. IEEE Transactions on Power Electronics, 2020, 35, 4063-4075.	5.4	34
39	Suppression of DC-Link Current Ripple for Modular Multilevel Converters Under Phase-Disposition PWM. IEEE Transactions on Power Electronics, 2020, 35, 3310-3324.	5.4	33
40	Balanced Power Device Currents Based Modulation Strategy for Full-Bridge Three-Level DC/DC Converter. IEEE Transactions on Power Electronics, 2020, 35, 2008-2022.	5.4	11
41	Power Losses Control for Modular Multilevel Converters Under Capacitor Deterioration. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2020, 8, 4318-4332.	3.7	37
42	Detection and location of open-circuit fault for modular multilevel converter. International Journal of Electrical Power and Energy Systems, 2020, 115, 105425.	3.3	13
43	Accurate Calculation and Sensitivity Analysis of Leakage Inductance of High-Frequency Transformer With Litz Wire Winding. IEEE Transactions on Power Electronics, 2020, 35, 3951-3962.	5.4	31
44	An Impedance-Based Stability Assessment Methodology for DC Distribution Power System With Multivoltage Levels. IEEE Transactions on Power Electronics, 2020, 35, 4033-4047.	5.4	37
45	Output Impedance Modeling and High-Frequency Impedance Shaping Method for Distributed Bidirectional DCâ€“DC Converters in DC Microgrids. IEEE Transactions on Power Electronics, 2020, 35, 7001-7014.	5.4	18
46	A Currentless Submodule Individual Voltage Balancing Control for Modular Multilevel Converters. IEEE Transactions on Industrial Electronics, 2020, 67, 9370-9382.	5.2	36
47	A Wireless Power Transfer System With Dual Switch-Controlled Capacitors for Efficiency Optimization. IEEE Transactions on Power Electronics, 2020, 35, 6091-6101.	5.4	85
48	Energy Management System for DC Electric Spring With Parallel Topology. IEEE Transactions on Industry Applications, 2020, 56, 5385-5395.	3.3	8
49	Decoupled Power Control With Indepth Analysis of Single-Phase Electric Springs. IEEE Access, 2020, 8, 21866-21874.	2.6	10
50	A Novel Method Simulating Human Eye Recognition for Sector Judgement of SVPWM Algorithm. IEEE Access, 2020, 8, 90216-90224.	2.6	2
51	Circulating current suppression control for modular multilevel converters based on restricted self-redundant states prediction. Journal of Power Electronics, 2020, 20, 1149-1161.	0.9	1
52	A Three-Phase Triple-Voltage Dual-Active-Bridge Converter for Medium Voltage DC Transformer to Reduce the Number of Submodules. IEEE Transactions on Power Electronics, 2020, 35, 11574-11588.	5.4	14
53	Overview on submodule topologies, modeling, modulation, control schemes, fault diagnosis, and tolerant control strategies of modular multilevel converters. Chinese Journal of Electrical Engineering, 2020, 6, 1-21.	2.3	94
54	A Parameter-Exempted, High-Performance Power Decoupling Control of Single-Phase Electric Springs. IEEE Access, 2020, 8, 33370-33379.	2.6	11

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55	Investigation Into Multi-Phase Armature Windings for High-Temperature Superconducting Wind Turbine Generators. IEEE Transactions on Applied Superconductivity, 2020, 30, 1-5.	1.1	2
56	Triple-Phase-Shift Modulation Strategy for Diode-Clamped Full-Bridge Three-Level Isolated DC/DC Converter. IEEE Access, 2020, 8, 2750-2759.	2.6	11
57	Hybrid Modular Multilevel Converter with Self-Balancing Structure. , 2020, , .		4
58	A double input-parallel-output-series hybrid switched-capacitor boost converter. Chinese Journal of Electrical Engineering, 2020, 6, 15-27.	2.3	19
59	Impacts of Inductor Nonlinear Characteristic in Multiconverter Microgrids: Modeling, Analysis, and Mitigation. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2020, 8, 3333-3347.	3.7	17
60	Modular Multilevel Converter and Cycloconverter Based Machine Drive Systems. , 2020, , .		6
61	Statistical Multi-Faults Localization Strategy of Switch Open-Circuit Fault for Modular Multilevel Converters Using Grubbs Criterion. , 2020, , .		1
62	Space Vector Modulation Strategy of Three Phase Multilevel Current Source Rectifer. , 2020, , .		0
63	Influence of Electromagnetic Fluctuation on the Behaviors of NI REBCO Racetrack Coils Applied in MW-Class Wind Turbine Generator. , 2020, , .		0
64	A Robust Voltage Sensorless Droop Control Strategy of Microgrid Against Parameters Perturbation. , 2020, , .		1
65	Efficiency Modelling and Analysis of Multi-bus Microgrid with Transmission Network. , 2020, , .		0
66	A Comparative Study of Modulation Strategies for Diode-Clamped Full-Bridge Three-Level Isolated DC/DC Converter. , 2020, , .		0
67	Design of Inverter Side Inductance for LCL Filter in Modular Multilevel Converters. , 2020, , .		0
68	Reference Submodule Based Capacitor Monitoring Strategy for Modular Multilevel Converters. IEEE Transactions on Power Electronics, 2019, 34, 4711-4721.	5.4	57
69	Improved Reference Generation of Active and Reactive Power for Matrix Converter With Model Predictive Control Under Input Disturbances. IEEE Access, 2019, 7, 97001-97012.	2.6	10
70	A topology of DC electric springs for DC household applications. IET Power Electronics, 2019, 12, 1241-1248.	1.5	21
71	Thyristorâ€based modular multilevel converterâ€HVDC systems with current interruption capability. IET Power Electronics, 2019, 12, 3056-3067.	1.5	12
72	Hierarchical Control with Fast Primary Control for Multiple Single-Phase Electric Springs. Energies, 2019, 12, 3511.	1.6	1

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73	Distributed Cooperative Control for Multiple DC Electric Springs with Novel Topologies Applied in DC Microgrid. , 2019, , .		7
74	Robust Droop Control of AC Microgrid Against Nonlinear Characteristic of Inductor. , 2019, , .		11
75	Adaptive Droop Control Strategy of Autonomous Microgrid for Efficiency Improvement. , 2019, , .		7
76	Regulation Performance of Multiple DC Electric Springs Controlled by Distributed Cooperative System. Energies, 2019, 12, 3422.	1.6	5
77	Lifetime-Oriented Droop Control Strategy for AC Islanded Microgrids. IEEE Transactions on Industry Applications, 2019, 55, 3252-3263.	3.3	28
78	A Three-Phase Four-Level Rectifier with Reduced Component Count. , 2019, , .		1
79	Capacitor Monitoring for Full-Bridge Submodule Based Modular Multilevel Converters. , 2019, , .		5
80	Faultâ€tolerant compensation control for Tâ€type threeâ€level inverter with zeroâ€sequence voltage injection. IET Power Electronics, 2019, 12, 3774-3781.	1.5	6
81	An Active High Frequency Damping Scheme for the Current Control of L Filter-Based Grid-Connected Inverter. IEEE Access, 2019, 7, 171738-171751.	2.6	4
82	A Three-Phase Hybrid Four-Level Rectifier. , 2019, , .		2
83	Unipolar Double-Star Submodule for Modular Multilevel Converter With DC Fault Blocking Capability. IEEE Access, 2019, 7, 136094-136105.	2.6	11
84	Modified Feedforward Control to Suppress DC Voltage Disturbances for Three-Stage MMC-PET. , 2019, , .		4
85	Circulating Current Control Scheme Under Capacitor Aging In Modular Multilevel Converter. , 2019, , .		1
86	Comparison of Levelized Cost of Energy of Superconducting Direct Drive Generators for a 10-MW Offshore Wind Turbine. IEEE Transactions on Applied Superconductivity, 2018, 28, 1-5.	1.1	23
87	Zero-Voltage Switching Full-Bridge T-Type DC/DC Converter with Wide Input Voltage Range and Balanced Switch Currents. IEEE Transactions on Power Electronics, 2018, 33, 10449-10466.	5.4	28
88	A new strategy based on hybrid batteryâ€“wind power system for wind power dispatching. IET Generation, Transmission and Distribution, 2018, 12, 160-169.	1.4	27
89	Triangle Carrier-Based DPWM for Three-Level NPC Inverters. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2018, 6, 1966-1978.	3.7	39
90	Protection Scheme for Modular Multilevel Converters Under Diode Open-Circuit Faults. IEEE Transactions on Power Electronics, 2018, 33, 2866-2877.	5.4	32

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91	Zero-Voltage Switching PWM Strategy Based Capacitor Current-Balancing Control for Half-Bridge Three-Level DC/DC Converter. IEEE Transactions on Power Electronics, 2018, 33, 357-369.	5.4	20
92	Periodically Swapping Modulation (PSM) Strategy for Three-Level (TL) DC/DC Converters With Balanced Switch Currents. IEEE Transactions on Industrial Electronics, 2018, 65, 412-423.	5.2	14
93	Full-Bridge T-type Isolated DC/DC Converter with Wide Input Voltage Range. , 2018, , .		0
94	The State of the Art of the Control Strategies for Single-Phase Electric Springs. Applied Sciences (Switzerland), 2018, 8, 2019.	1.3	5
95	Triple-Phase-Shift Control Strategy for Full-Bridge Three-Level (FBTL) DC/DC Converter. , 2018, , .		2
96	Lifetime-Oriented Droop Control Strategy for AC Islanded Microgrids. , 2018, , .		2
97	Dead-Beat Control Cooperating with State Observer for Single-Phase Electric Springs. Applied Sciences (Switzerland), 2018, 8, 2335.	1.3	0
98	Enhanced Control of DFIG Wind Turbine Based on Stator Flux Decay Compensation. , 2018, , .		1
99	The State of the Art of Topologies for Electric Springs. Energies, 2018, 11, 1724.	1.6	8
100	Input-Parallel Output-Parallel Three-Level DC/DC Converters With Interleaving Control Strategy for Minimizing and Balancing Capacitor Ripple Currents. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2017, 5, 1122-1132.	3.7	36
101	Integration of Large Photovoltaic and Wind System by Means of Smart Transformer. IEEE Transactions on Industrial Electronics, 2017, 64, 8928-8938.	5.2	58
102	A generalized discontinuous PWM based neutral point voltage balancing method for three-level NPC voltage source inverter with switching losses reduction. , 2017, , .		11
103	A ZVS PWM control strategy with balanced capacitor current for half-bridge three-level DC/DC converter. , 2017, , .		1
104	Control strategy of wind turbine based on permanent magnet synchronous generator and energy storage for stand-alone systems. Chinese Journal of Electrical Engineering, 2017, 3, 51-62.	2.3	26
105	Five-Level Active-Neutral-Point-Clamped DC/DC Converter for Medium-Voltage DC Grids. IEEE Transactions on Power Electronics, 2017, 32, 3402-3412.	5.4	40
106	Novel topology of three-phase electric spring and its control. , 2017, , .		2
107	Capacitor monitoring for modular multilevel converters. , 2017, , .		12
108	The topologies research of a soft switching bidirectional DC/DC converter. , 2017, , .		4

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109	A zero-voltage switching control strategy for dual half-bridge cascaded three-level DC/DC converter with balanced capacitor voltages. , 2017, , .		2
110	A Hierarchical Model Predictive Voltage Control for NPC/H-Bridge Converters with a Reduced Computational Burden. Journal of Power Electronics, 2017, 17, 136-148.	0.9	4
111	Input-parallel output-parallel (IPOP) three-level (TL) DC/DC converters with minimized capacitor ripple currents. , 2016, , .		4
112	Modular multilevel converters based variable speed wind turbines for grid faults. , 2016, , .		7
113	A double phase-shift control strategy for a full-bridge three-level DC/DC converter. , 2016, , .		1
114	Control of three-phase electric springs used in microgrids under ideal and non-ideal conditions. , 2016, , .		7
115	Impedance interactions in bidirectional cascaded converter. IET Power Electronics, 2016, 9, 2482-2491.	1.5	19
116	Dynamic droop scheme considering effect of intermittent renewable energy source. , 2016, , .		4
117	Enhanced static ground power unit based on flying capacitor based hâ€bridge hybrid activeâ€neutralâ€pointâ€clamped converter. IET Power Electronics, 2016, 9, 2337-2349.	1.5	18
118	DC electric springs with DC/DC converters. , 2016, , .		6
119	Five-level active-neutral-point-clamped DC/DC converter. , 2016, , .		0
120	Enhanced Control of DFIG Wind Turbine Based on Stator Flux Decay Compensation. IEEE Transactions on Energy Conversion, 2016, 31, 1366-1376.	3.7	20
121	Impedance Coordinative Control for Cascaded Converter in Bidirectional Application. IEEE Transactions on Industry Applications, 2016, 52, 4084-4095.	3.3	17
122	Fault-Tolerant Approach for Modular Multilevel Converters Under Submodule Faults. IEEE Transactions on Industrial Electronics, 2016, 63, 7253-7263.	5.2	118
123	Dual-Loop Control Strategy for DFIG-Based Wind Turbines Under Grid Voltage Disturbances. IEEE Transactions on Power Electronics, 2016, 31, 2239-2253.	5.4	46
124	DC-Link Voltage Coordinated-Proportional Control for Cascaded Converter With Zero Steady-State Error and Reduced System Type. IEEE Transactions on Power Electronics, 2016, 31, 3177-3188.	5.4	18
125	A New Interleaved Double-Input Three-Level Boost Converter. Journal of Power Electronics, 2016, 16, 925-935.	0.9	9
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127	Impedance analysis of control modes in cascaded converter. , 2015, , .		0
128	DC-link voltage coordinative-proportional control in cascaded converter systems. , 2015, , .		0
129	Voltage-Balancing Method for Modular Multilevel Converters Under Phase-Shifted Carrier-Based Pulsewidth Modulation. IEEE Transactions on Industrial Electronics, 2015, 62, 4158-4169.	5.2	90
130	Virtual Damping Flux-Based LVRT Control for DFIG-Based Wind Turbine. IEEE Transactions on Energy Conversion, 2015, 30, 714-725.	3.7	97
131	Impedance interaction modeling and analysis for bidirectional cascaded converters. , 2015, , .		8
132	Impedance coordinative control for cascaded converter in bidirectional application. , 2015, , .		3
133	A bidirectional multi-port DC-DC converter integrating voltage equalizer. , 2015, , .		0
134	Active Power and DC Voltage Coordinative Control for Cascaded DCâ€“AC Converter With Bidirectional Power Application. IEEE Transactions on Power Electronics, 2015, 30, 5911-5925.	5.4	31
135	Fault Detection and Localization Method for Modular Multilevel Converters. IEEE Transactions on Power Electronics, 2015, 30, 2721-2732.	5.4	212
136	Voltage-Balancing Method for Modular Multilevel Converters Switched at Grid Frequency. IEEE Transactions on Industrial Electronics, 2015, 62, 2835-2847.	5.2	92
137	Elimination of DC-Link Current Ripple for Modular Multilevel Converters With Capacitor Voltage-Balancing Pulse-Shifted Carrier PWM. IEEE Transactions on Power Electronics, 2015, 30, 284-296.	5.4	33
138	Coodinative control of active power and DC-link voltage for cascaded dual-active-bridge and inverter in bidirectional applications. , 2014, , .		2
139	A Control Method for Voltage Balancing in Modular Multilevel Converters. IEEE Transactions on Power Electronics, 2014, 29, 66-76.	5.4	262
140	Operation and Control of a DC-Grid Offshore Wind Farm Under DC Transmission System Faults. IEEE Transactions on Power Delivery, 2013, 28, 1356-1363.	2.9	77
141	Design of Protective Inductors for HVDC Transmission Line Within DC Grid Offshore Wind Farms. IEEE Transactions on Power Delivery, 2013, 28, 75-83.	2.9	70
142	Control of Improved Full-Bridge Three-Level DC/DC Converter for Wind Turbines in a DC Grid. IEEE Transactions on Power Electronics, 2013, 28, 314-324.	5.4	109
143	An offshore wind farm with DC grid connection and its performance under power system transients. , 2011, , .		21
144	A new structure based on cascaded multilevel converter for variable speed wind turbine. , 2010, , .		23

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145	Variable speed wind turbine based on multiple generators drive-train configuration. , 2010, , .		1
146	Low-voltage ride-through of variable speed wind turbines with permanent magnet synchronous generator. , 2009, , .		22
147	Power control of permanent magnet generator based variable speed wind turbines. , 2009, , .		19
148	Two Control Strategies for Aggregated Wind Turbine Model with Permanent Magnet Synchronous Generator. Renewable Energy and Power Quality Journal, 0, , 1338-1343.	0.2	1
149	Analysis and stabilization control of a voltage source controlled wind farm under weak grid conditions. Frontiers in Energy, 0, , 1.	1.2	2