

John Edward Fletcher

List of Publications by Year in descending order

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139
papers

3,147
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172457

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141
all docs

141
docs citations

141
times ranked

3154
citing authors

#	ARTICLE	IF	CITATIONS
1	Short-Circuit and Ground Fault Analyses and Location in VSC-Based DC Network Cables. IEEE Transactions on Industrial Electronics, 2012, 59, 3827-3837.	7.9	644
2	Model Predictive Control for DC-DC Boost Converters With Reduced-Prediction Horizon and Constant Switching Frequency. IEEE Transactions on Power Electronics, 2018, 33, 9064-9075.	7.9	120
3	Hybrid Cascaded Modular Multilevel Converter With DC Fault Ride-Through Capability for the HVDC Transmission System. IEEE Transactions on Power Delivery, 2015, 30, 1853-1862.	4.3	112
4	A Hybrid Modular Multilevel Converter With Novel Three-Level Cells for DC Fault Blocking Capability. IEEE Transactions on Power Delivery, 2015, 30, 2017-2026.	4.3	99
5	Integration of photovoltaic energy supply with membrane capacitive deionization (MCDI) for salt removal from brackish waters. Water Research, 2018, 147, 276-286.	11.3	94
6	Combined Speed and Direct Thrust Force Control of Linear Permanent-Magnet Synchronous Motors With Sensorless Speed Estimation Using a Sliding-Mode Control With Integral Action. IEEE Transactions on Industrial Electronics, 2017, 64, 3489-3501.	7.9	93
7	Sequence-Based Control Strategy With Current Limiting for the Fault Ride-Through of Inverter-Interfaced Distributed Generators. IEEE Transactions on Sustainable Energy, 2020, 11, 165-174.	8.8	86
8	New Efficient Submodule for a Modular Multilevel Converter in Multiterminal HVDC Networks. IEEE Transactions on Power Electronics, 2017, 32, 4258-4278.	7.9	70
9	Energy recovery in pilot scale membrane CDI treatment of brackish waters. Water Research, 2020, 168, 115146.	11.3	64
10	Influence of third harmonic injection on modular multilevel converter -based high-voltage direct current transmission systems. IET Generation, Transmission and Distribution, 2016, 10, 2764-2770.	2.5	62
11	A Linear Quadratic Regulator-Based Optimal Direct Thrust Force Control of Linear Permanent-Magnet Synchronous Motor. IEEE Transactions on Industrial Electronics, 2016, 63, 2722-2733.	7.9	61
12	Multi-Timescale Model Predictive Control of Battery Energy Storage System Using Conic Relaxation in Smart Distribution Grids. IEEE Transactions on Power Systems, 2018, 33, 7152-7161.	6.5	60
13	A Direct Thrust Control Scheme for Linear Permanent Magnet Synchronous Motor Based on Online Duty Ratio Control. IEEE Transactions on Power Electronics, 2016, 31, 4416-4428.	7.9	59
14	A Simple Smooth Transition Technique for the Noninverting Buck-Boost Converter. IEEE Transactions on Power Electronics, 2018, 33, 4906-4915.	7.9	57
15	Feedback Linearization Control in Photovoltaic Module Integrated Converters. IEEE Transactions on Power Electronics, 2019, 34, 6876-6889.	7.9	49
16	On the Impact of Transients on Multistep Model Predictive Control for Medium-Voltage Drives. IEEE Transactions on Power Electronics, 2019, 34, 8342-8355.	7.9	48
17	Space-Vector PWM Technique for Five-Phase Open-End Winding PMSM Drive Operating in the Overmodulation Region. IEEE Transactions on Industrial Electronics, 2018, 65, 6816-6827.	7.9	42
18	Sliding Mode Based Combined Speed and Direct Thrust Force Control of Linear Permanent Magnet Synchronous Motors With First-Order Plus Integral Sliding Condition. IEEE Transactions on Power Electronics, 2019, 34, 2526-2538.	7.9	41

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19	Low cost desalination of brackish groundwaters by Capacitive Deionization (CDI) – Implications for irrigated agriculture. <i>Desalination</i> , 2019, 453, 37-53.	8.2	40
20	Comparison of Virtual Oscillator and Droop Controlled Islanded Three-Phase Microgrids. <i>IEEE Transactions on Energy Conversion</i> , 2019, 34, 1769-1780.	5.2	39
21	Enhanced Flat-Topped Modulation for MMC Control in HVDC Transmission Systems. <i>IEEE Transactions on Power Delivery</i> , 2017, 32, 152-161.	4.3	38
22	Challenges and Mitigation Measures in Power Systems with High Share of Renewables – The Australian Experience. <i>Energies</i> , 2022, 15, 429.	3.1	38
23	Rapid separation of isomeric perfluoroalkyl substances by high-resolution differential ion mobility mass spectrometry. <i>Analytica Chimica Acta</i> , 2019, 1058, 127-135.	5.4	37
24	The Equivalent Models of Grid-Forming Inverters in the Sequence Domain for the Steady-State Analysis of Power Systems. <i>IEEE Transactions on Power Systems</i> , 2020, 35, 2876-2887.	6.5	35
25	Optimal, Combined Speed, and Direct Thrust Control of Linear Permanent Magnet Synchronous Motors. <i>IEEE Transactions on Energy Conversion</i> , 2016, 31, 947-958.	5.2	33
26	Space Vector PWM Techniques for Three-to-Five-Phase Indirect Matrix Converter in the Overmodulation Region. <i>IEEE Transactions on Industrial Electronics</i> , 2016, 63, 550-561.	7.9	32
27	Maximum PV generation estimation method for residential low voltage feeders. <i>Sustainable Energy, Grids and Networks</i> , 2016, 7, 58-69.	3.9	31
28	Analytical Modeling of Armature Reaction Air-Gap Flux Density Considering the Non-Homogeneously Saturated Rotor in a Fractional-Slot Concentrated-Wound IPM Machine. <i>IEEE Transactions on Magnetics</i> , 2017, 53, 1-12.	2.1	31
29	Design of Optimal Winding Configurations for Symmetrical Multiphase Concentrated-Wound Surface-Mount PMSMs to Achieve Maximum Torque Density Under Current Harmonic Injection. <i>IEEE Transactions on Industrial Electronics</i> , 2018, 65, 1751-1761.	7.9	31
30	High-Frequency Planar Transformer Parameter Estimation. <i>IEEE Transactions on Magnetics</i> , 2015, 51, 1-4.	2.1	29
31	Dispatchable Virtual Oscillator Control for Single-Phase Islanded Inverters: Analysis and Experiments. <i>IEEE Transactions on Industrial Electronics</i> , 2021, 68, 4812-4826.	7.9	29
32	Control of Distributed Photovoltaic Inverters for Frequency Support and System Recovery. <i>IEEE Transactions on Power Electronics</i> , 2022, 37, 4742-4750.	7.9	29
33	Postfault Zero-Sequence Current Injection for Open-Circuit Diode/Switch Failure in Open-End Winding PMSM Machines. <i>IEEE Transactions on Industrial Electronics</i> , 2019, 66, 5124-5132.	7.9	27
34	Suitability of representative electrochemical energy storage technologies for ramp-rate control of photovoltaic power. <i>Journal of Power Sources</i> , 2018, 384, 396-407.	7.8	25
35	FOC Transformation for Single Open-Phase Faults in the Five-Phase Open-End Winding Topology. <i>IEEE Transactions on Industrial Electronics</i> , 2020, 67, 842-851.	7.9	25
36	Trends in the protection of inverter-based microgrids. <i>IET Generation, Transmission and Distribution</i> , 2019, 13, 4511-4522.	2.5	24

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37	Studies on dynamic responses and impedance of the vanadium redox flow battery. Applied Energy, 2019, 237, 91-102.	10.1	24
38	Robust Frequency, Phase, and Amplitude Estimation in Power Systems Considering Harmonics. IEEE Transactions on Power Delivery, 2020, 35, 1158-1168.	4.3	24
39	Optimal Dispatch of Battery Energy Storage System Using Convex Relaxations in Unbalanced Distribution Grids. IEEE Transactions on Industrial Informatics, 2020, 16, 97-108.	11.3	23
40	Detailed Analytical Modeling of Fractional-Slot Concentrated-Wound Interior Permanent Magnet Machines for Prediction of Torque Ripple. IEEE Transactions on Industry Applications, 2017, 53, 5272-5283.	4.9	22
41	Low complexity predictive torque control strategies for a three-level inverter driven induction motor. IET Electric Power Applications, 2017, 11, 776-783.	1.8	20
42	A novel MMC control scheme to increase the DC voltage in HVDC transmission systems. Electric Power Systems Research, 2017, 143, 544-553.	3.6	20
43	Modified MPC with extended VVs for grid-connected rectifier. IET Power Electronics, 2018, 11, 1926-1936.	2.1	20
44	Testing Evidence and Analysis of Rooftop PV Inverters Response to Grid Disturbances. IEEE Journal of Photovoltaics, 2020, 10, 1882-1891.	2.5	20
45	Glaucoma diagnosis using multi-feature analysis and a deep learning technique. Scientific Reports, 2022, 12, 8064.	3.3	18
46	A Novel High-Resolution Optical Encoder With Axially Stacked Coded Disk for Modular Joints: Physical Modeling and Experimental Validation. IEEE Sensors Journal, 2018, 18, 6001-6008.	4.7	17
47	Optimization of constant-current operation in membrane capacitive deionization (MCDI) using variable discharging operations. Water Research, 2021, 204, 117646.	11.3	17
48	Power flow and transmission loss analysis of modular multi-level converter based multi-terminal high-voltage DC systems. IET Renewable Power Generation, 2016, 10, 767-775.	3.1	16
49	Site specific assessment of the viability of membrane Capacitive Deionization (mCDI) in desalination of brackish groundwaters for selected crop watering. Desalination, 2021, 502, 114913.	8.2	16
50	Nanosecond Pulsed Dielectric Barrier Discharge Ionization Mass Spectrometry. Analytical Chemistry, 2020, 92, 4468-4474.	6.5	15
51	Double-Frequency Method Using Differential Evolution for Identifying Parameters in the Dynamic Jiles-Atherton Model of Mn-Zn Ferrites. IEEE Transactions on Instrumentation and Measurement, 2013, 62, 460-466.	4.7	14
52	Dynamic Aggregation of Energy Storage Systems Into Virtual Power Plants Using Distributed Real-Time Clustering Algorithm. IEEE Transactions on Industrial Electronics, 2021, 68, 11002-11013.	7.9	14
53	A Controller Improving Photovoltaic Voltage Regulation in the Single-Stage Single-Phase Inverter. IEEE Transactions on Power Electronics, 2022, 37, 354-363.	7.9	14
54	Autonomous micro-grid operation by employing weak droop control and PQ control. , 2014, , .		13

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55	Multi-tasking dc-dc and dc-ac converters for dc voltage tapping and power control in highly meshed multi-terminal HVDC networks. IET Power Electronics, 2017, 10, 2217-2228.	2.1	13
56	Design and Performance Investigation of the Double-Sided Linear Induction Motor With a Ladder-Slot Secondary. IEEE Transactions on Energy Conversion, 2019, 34, 1603-1612.	5.2	13
57	Multi-Timescale Voltage Stability-Constrained Volt/VAR Optimization With Battery Storage System in Distribution Grids. IEEE Transactions on Sustainable Energy, 2020, 11, 868-878.	8.8	13
58	Improved Two-Level Voltage Source Converter for High-Voltage Direct Current Transmission Systems. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2017, 5, 1670-1686.	5.4	12
59	Effects of Different Waveforms on the Performance of Active Capillary Dielectric Barrier Discharge Ionization Mass Spectrometry. Journal of the American Society for Mass Spectrometry, 2017, 28, 575-578.	2.8	12
60	Fast-Swap Charging: An Improved Operation Mode For Catenary-Free Light Rail Networks. IEEE Transactions on Vehicular Technology, 2018, 67, 2912-2920.	6.3	12
61	Operation of Autonomous AC Microgrid at Constant Frequency and with Reactive Power Generation from Grid-forming, Grid-supporting and Grid-feeding Generators. , 2018, , .		12
62	Ambient Pressure Ion Funnel: Concepts, Simulations, and Analytical Performance. Analytical Chemistry, 2020, 92, 15811-15817.	6.5	12
63	Output Power Regulation of a Virtual Oscillator Controlled Inverter. , 2018, , .		11
64	Comparative analysis of wave winding topologies and performance characteristics in ultra-thin printed circuit board axial-flux permanent magnet machine. IET Electric Power Applications, 2019, 13, 694-701.	1.8	11
65	Control Design for Photovoltaic Power Optimizers Using Bootstrap Circuit. IEEE Transactions on Energy Conversion, 2019, 34, 232-242.	5.2	11
66	Impact of Grid Voltage and Grid-Supporting Functions on Efficiency of Single-Phase Photovoltaic Inverters. IEEE Journal of Photovoltaics, 2022, 12, 421-428.	2.5	11
67	DC fault protection structures at a DC-link node in a radial multi-terminal high-voltage direct current system. IET Renewable Power Generation, 2016, 10, 744-751.	3.1	10
68	Implementation of a Nonlinear Planar Magnetics Model. IEEE Transactions on Power Electronics, 2016, 31, 6534-6542.	7.9	10
69	Protection of inverter-based microgrids from ground faults by an innovative directional element. IET Generation, Transmission and Distribution, 2018, 12, 5918-5927.	2.5	10
70	Developing a machine equivalent inertial response for a Virtual Oscillator Controlled Inverter in a machine-inverter based microgrid. , 2020, , .		10
71	Planar PCB Transformer Model for Circuit Simulation. IEEE Transactions on Magnetics, 2016, 52, 1-4.	2.1	9
72	A novel approach to investigate the deterioration of insulation of oils in power transformers with terahertz time-domain spectroscopy. IEEE Transactions on Dielectrics and Electrical Insulation, 2017, 24, 930-938.	2.9	9

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73	Improving generation ramp rates of photovoltaic systems using module-based capacitive energy storage. <i>Journal of Power Sources</i> , 2019, 423, 227-235.	7.8	8
74	Hybrid converter topologies for dc transmission systems. <i>IET Power Electronics</i> , 2019, 12, 607-619.	2.1	8
75	Sensorless vector control of linear permanent magnet synchronous motor. , 2013, , .		7
76	A novel controller for harmonics reduction of grid-tied converters in unbalanced networks. <i>Electric Power Systems Research</i> , 2018, 155, 296-306.	3.6	7
77	Similarities Between Virtual Oscillator Controlled and Droop Controlled Three-Phase Inverters. , 2018, , .		7
78	Analysis on the Behavior of Grid-Connected Single-Phase Photovoltaic Inverters Under Voltage Phase-Angle Jumps. , 2021, , .		7
79	Performance of three- and five-phase PM-based wind generators under rectifier diode failures. , 2011, , .		6
80	Sensorless control of linear permanent magnet synchronous motors using a combined sliding mode adaptive observer. , 2014, , .		6
81	Charging Control of Vanadium Redox Battery Based Energy Storage Systems with Variable Input Power. , 2018, , .		6
82	Regulation of active and reactive power of a virtual oscillator controlled inverter. <i>IET Generation, Transmission and Distribution</i> , 2020, 14, 62-69.	2.5	6
83	Comparative Analysis of Flexible Power Point Tracking Algorithms in Photovoltaic Systems. , 2020, , .		6
84	Distributed Photovoltaic Invertersâ€™ Response to Voltage Phase-Angle Jump. <i>IEEE Journal of Photovoltaics</i> , 2022, 12, 429-436.	2.5	6
85	Space vector PWM for three-to-five phase indirect matrix converters with d and q vector elimination. , 2013, , .		5
86	Simultaneous Regulation of Active and Reactive Output Power of Parallel-Connected Virtual Oscillator Controlled Inverters. , 2018, , .		5
87	Torque Ripple Suppression for Open-End Multi-Phase PMSMs Operating Under Open-Phase Faults. , 2018, , .		5
88	Sensitivity of Commercial Rooftop Photovoltaic Inverters to Grid Voltage Swell. , 2021, , .		5
89	Analysis of common mode voltage using carrier-based method for dual-inverter open-end winding. , 2014, , .		4
90	Electromagnetic and thermal characterisation of PCB planar transformer. , 2015, , .		4

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91	Design of cascaded control loop for solar power optimizer based on a buck-boost converter. , 2016, , .		4
92	Feedback linearization control of non-inverting buck-boost PV power optimizers. , 2017, , .		4
93	Lossless bi-directional current sense circuit for low-voltage high-current DC/DC converters. , 2018, , .		4
94	An Intelligent Pass-Through Algorithm for Non-Inverting Buck-Boost Solar Power Optimizers. , 2019, , .		4
95	Transient Analysis of Line-Start Permanent Magnet Linear Synchronous Motors. IEEE Transactions on Energy Conversion, 2021, 36, 3365-3375.	5.2	4
96	Analytical Calculation of the Mechanical Stress on IPMSM Bridges with Decomposition of the Centrifugal Force. , 2021, , .		4
97	Development of an Aggregation Tool for PV Inverter Response to Frequency Disturbances across a Distribution Feeder. , 2020, , .		4
98	AC Voltage Control of DC/DC Converters Based on Modular Multilevel Converters in Multi-Terminal High-Voltage Direct Current Transmission Systems. Energies, 2016, 9, 1064.	3.1	3
99	A cascaded boost inverter based battery energy storage system with reduced battery ripple current. , 2017, , .		3
100	Thermal modelling for demand response of residential buildings. , 2017, , .		3
101	Transient response comparison of virtual oscillator controlled and droop controlled three-phase inverters under load changes. IET Generation, Transmission and Distribution, 2020, 14, 1138-1147.	2.5	3
102	Analysis of the limitations of conventional direct thrust control scheme for linear permanent magnet synchronous motors. , 2013, , .		2
103	Overmodulation techniques for the three-to-five phase indirect matrix converter with space vector PWM. , 2014, , .		2
104	Comparative study of multicore planar transformers on printed circuit boards. IET Power Electronics, 2017, 10, 1452-1460.	2.1	2
105	Airgap magnetic field estimation for IPM rotors considering their non-uniform local saturation. , 2017, , .		2
106	Topologies for Reduction of Second Harmonic Ripple in Battery Energy Storage Systems. , 2019, , .		2
107	Mechanical Field Weakening Techniques for an Axial Flux Machine. , 2019, , .		2
108	Fault Tolerant Online Condition Monitor of DC-Link Capacitor for Open-end Winding Machine. , 2019, , .		2

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109	Flexible Power Point Tracking in Cascaded H-Bridge Converter-Based Photovoltaic Systems. , 2020, , .		2
110	Optimal, Combined Speed and Direct Thrust Force Control of a Linear Permanent Magnet Synchronous Motors. Power Systems, 2020, , 135-153.	0.5	2
111	Pulsed Nanoelectrospray Ionization Boosts Ion Signal in Whole Protein Mass Spectrometry. Applied Sciences (Switzerland), 2021, 11, 10883.	2.5	2
112	Simplified Piecewise Model of Line-Start Permanent Magnet Linear Synchronous Motors. IEEE Transactions on Industry Applications, 2022, 58, 6093-6104.	4.9	2
113	Quantification of Required Multi-Segments for Accurately Computing Induced Voltage in a Ferrite Inductor Using Static and Dynamic Jiles-Atherton Models. IEEE Transactions on Magnetics, 2013, 49, 5424-5429.	2.1	1
114	Electrical power engineering education at UNSW. , 2013, , .		1
115	Space vector PWM for five-to-three phase conventional matrix converter with d<inf>2</inf>–q<inf>2</inf> vector elimination. , 2013, , .		1
116	Ring DC node configurations for enhanced DC fault protection in multiterminal HVDC networks. , 2015, , .		1
117	Modeling a DC-current-controlled variable inductance and its application to grid-tied converters. , 2016, , .		1
118	Existence of Sinusoidal Orbits of a Nonlinear Proportional and Resonant Current Regulator for Islanded Microgrids. , 2018, , .		1
119	Model Predictive Control of a Multi-String LCL-Type Grid-Connected H-NPC PV Converter. , 2018, , .		1
120	Modelling virtual oscillatorâ€controlled microgrids. IET Generation, Transmission and Distribution, 2019, 13, 2173-2181.	2.5	1
121	Advanced Direct Thrust Force Control of Linear Permanent Magnet Synchronous Motor. Power Systems, 2020, , .	0.5	1
122	Longitudinal End Effect of Line-Start Permanent Magnet Linear Synchronous Motors. , 2021, , .		1
123	Faultâ€tolerant strategies for openâ€circuit switch failures in openâ€end winding PMSM drives. Journal of Engineering, 2021, 2021, 621-629.	1.1	1
124	Mathematical Modeling of Surface-Mount Linear Permanent Magnet Synchronous Motor. Power Systems, 2020, , 13-43.	0.5	1
125	Practical distributed voltage control method for efficient and equitable intervention of distributed devices. IET Smart Grid, 2019, 2, 399-406.	2.2	1
126	A Gate Driver with a Negative Turn Off Bias Voltage for GaN HEMTs. , 2020, , .		1

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127	A Voltage-fed Control Method with Automatic Bidirectional Power Switching Capability for CLLC and SR Buck Based Two Stage Converters. , 2020, , .		1
128	A Power-electronics-based Modular Nanosecond Pulse Generation System for Plasma-assisted Ignition. IEEJ Journal of Industry Applications, 2015, 4, 227-234.	1.1	0
129	LPV controllers for a DFIG in a microgrid under unbalanced conditions. , 2015, , .		0
130	An Interleaved Boost Inverter Based Battery-Supercapacitor Hybrid Energy Storage System with a Reduced Number of Current Sensors. , 2018, , .		0
131	A Novel MPPT Strategy Based on Decentralized Control in subDPP Systems. , 2019, , .		0
132	Photovoltaic Power Generation with Module-Based Capacitive Energy Storage. , 2019, , .		0
133	Validation of Solar Photovoltaic Inverter Behavior to Grid Disturbances through Power-Hardware-in-the-Loop Testing. , 2021, , .		0
134	Analysis and Mitigation of Oscillations in Bi-directional CLLC Resonant Converters. , 2019, , .		0
135	SV-PWM Based Direct Thrust Force Control of a Linear Permanent Magnet Synchronous Motor. Power Systems, 2020, , 83-133.	0.5	0
136	Direct Thrust Force Control Based on Duty Ratio Control. Power Systems, 2020, , 45-82.	0.5	0
137	Sliding Mode Based Combined Speed and Direct Thrust Force Control of a Linear Permanent Magnet Synchronous Motors. Power Systems, 2020, , 155-179.	0.5	0
138	Sensorless Control of a Linear Permanent Magnet Synchronous Motors Using a Combined Sliding Mode Adaptive Observer. Power Systems, 2020, , 181-208.	0.5	0
139	Voltage Profile Improvement in Autonomous AC Microgrid Operated at Constant Frequency and Equivalent Parallel Operation of Inverters. , 2020, , .		0