

John Edward Fletcher

List of Publications by Year in descending order

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times ranked

3154
citing authors

#	ARTICLE	IF	CITATIONS
1	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
2	Challenges and Mitigation Measures in Power Systems with High Share of Renewablesâ€”The Australian Experience. Energies, 2022, 15, 429.	3.1	38
3	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
4	Control of Distributed Photovoltaic Inverters for Frequency Support and System Recovery. IEEE Transactions on Power Electronics, 2022, 37, 4742-4750.	7.9	29
5	Distributed Photovoltaic Invertersâ€™ Response to Voltage Phase-Angle Jump. IEEE Journal of Photovoltaics, 2022, 12, 429-436.	2.5	6
6	Glaucoma diagnosis using multi-feature analysis and a deep learning technique. Scientific Reports, 2022, 12, 8064.	3.3	18
7	Simplified Piecewise Model of Line-Start Permanent Magnet Linear Synchronous Motors. IEEE Transactions on Industry Applications, 2022, 58, 6093-6104.	4.9	2
8	Dispatchable Virtual Oscillator Control for Single-Phase Islanded Inverters: Analysis and Experiments. IEEE Transactions on Industrial Electronics, 2021, 68, 4812-4826.	7.9	29
9	Transient Analysis of Line-Start Permanent Magnet Linear Synchronous Motors. IEEE Transactions on Energy Conversion, 2021, 36, 3365-3375.	5.2	4
10	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
11	Analysis on the Behavior of Grid-Connected Single-Phase Photovoltaic Inverters Under Voltage Phase-Angle Jumps. , 2021, , .		7
12	Validation of Solar Photovoltaic Inverter Behavior to Grid Disturbances through Power-Hardware-in-the-Loop Testing. , 2021, , .		0
13	Sensitivity of Commercial Rooftop Photovoltaic Inverters to Grid Voltage Swell. , 2021, , .		5
14	Longitudinal End Effect of Line-Start Permanent Magnet Linear Synchronous Motors. , 2021, , .		1
15	Fault-tolerant strategies for open-circuit switch failures in open-end winding PMSM drives. Journal of Engineering, 2021, 2021, 621-629.	1.1	1
16	Optimization of constant-current operation in membrane capacitive deionization (MCDI) using variable discharging operations. Water Research, 2021, 204, 117646.	11.3	17
17	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
18	Analytical Calculation of the Mechanical Stress on IPMSM Bridges with Decomposition of the Centrifugal Force. , 2021, , .		4

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19	Pulsed Nanoelectrospray Ionization Boosts Ion Signal in Whole Protein Mass Spectrometry. Applied Sciences (Switzerland), 2021, 11, 10883.	2.5	2
20	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
21	FOC Transformation for Single Open-Phase Faults in the Five-Phase Open-End Winding Topology. IEEE Transactions on Industrial Electronics, 2020, 67, 842-851.	7.9	25
22	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
23	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
24	Robust Frequency, Phase, and Amplitude Estimation in Power Systems Considering Harmonics. IEEE Transactions on Power Delivery, 2020, 35, 1158-1168.	4.3	24
25	Energy recovery in pilot scale membrane CDI treatment of brackish waters. Water Research, 2020, 168, 115146.	11.3	64
26	Testing Evidence and Analysis of Rooftop PV Inverters Response to Grid Disturbances. IEEE Journal of Photovoltaics, 2020, 10, 1882-1891.	2.5	20
27	Ambient Pressure Ion Funnel: Concepts, Simulations, and Analytical Performance. Analytical Chemistry, 2020, 92, 15811-15817.	6.5	12
28	Flexible Power Point Tracking in Cascaded H-Bridge Converter-Based Photovoltaic Systems. , 2020, , .		2
29	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
30	Regulation of active and reactive power of a virtual oscillator controlled inverter. IET Generation, Transmission and Distribution, 2020, 14, 62-69.	2.5	6
31	Nanosecond Pulsed Dielectric Barrier Discharge Ionization Mass Spectrometry. Analytical Chemistry, 2020, 92, 4468-4474.	6.5	15
32	Advanced Direct Thrust Force Control of Linear Permanent Magnet Synchronous Motor. Power Systems, 2020, , .	0.5	1
33	The Equivalent Models of Grid-Forming Inverters in the Sequence Domain for the Steady-State Analysis of Power Systems. IEEE Transactions on Power Systems, 2020, 35, 2876-2887.	6.5	35
34	Mathematical Modeling of Surface-Mount Linear Permanent Magnet Synchronous Motor. Power Systems, 2020, , 13-43.	0.5	1
35	SV-PWM Based Direct Thrust Force Control of a Linear Permanent Magnet Synchronous Motor. Power Systems, 2020, , 83-133.	0.5	0
36	Direct Thrust Force Control Based on Duty Ratio Control. Power Systems, 2020, , 45-82.	0.5	0

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37	Optimal, Combined Speed and Direct Thrust Force Control of a Linear Permanent Magnet Synchronous Motors. Power Systems, 2020, , 135-153.	0.5	2
38	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
39	Sensorless Control of a Linear Permanent Magnet Synchronous Motors Using a Combined Sliding Mode Adaptive Observer. Power Systems, 2020, , 181-208.	0.5	0
40	Comparative Analysis of Flexible Power Point Tracking Algorithms in Photovoltaic Systems. , 2020, , .		6
41	Development of an Aggregation Tool for PV Inverter Response to Frequency Disturbances across a Distribution Feeder. , 2020, , .		4
42	Developing a machine equivalent inertial response for a Virtual Oscillator Controlled Inverter in a machine-inverter based microgrid. , 2020, , .		10
43	A Gate Driver with a Negative Turn Off Bias Voltage for GaN HEMTs. , 2020, , .		1
44	A Voltage-fed Control Method with Automatic Bidirectional Power Switching Capability for CLLC and SR Buck Based Two Stage Converters. , 2020, , .		1
45	Voltage Profile Improvement in Autonomous AC Microgrid Operated at Constant Frequency and Equivalent Parallel Operation of Inverters. , 2020, , .		0
46	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
47	Comparison of Virtual Oscillator and Droop Controlled Islanded Three-Phase Microgrids. IEEE Transactions on Energy Conversion, 2019, 34, 1769-1780.	5.2	39
48	Modelling virtual oscillator-controlled microgrids. IET Generation, Transmission and Distribution, 2019, 13, 2173-2181.	2.5	1
49	Trends in the protection of inverter-based microgrids. IET Generation, Transmission and Distribution, 2019, 13, 4511-4522.	2.5	24
50	A Novel MPPT Strategy Based on Decentralized Control in subDPP Systems. , 2019, , .		0
51	Topologies for Reduction of Second Harmonic Ripple in Battery Energy Storage Systems. , 2019, , .		2
52	Rapid separation of isomeric perfluoroalkyl substances by high-resolution differential ion mobility mass spectrometry. Analytica Chimica Acta, 2019, 1058, 127-135.	5.4	37
53	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
54	Improving generation ramp rates of photovoltaic systems using module-based capacitive energy storage. Journal of Power Sources, 2019, 423, 227-235.	7.8	8

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55	Hybrid converter topologies for dc transmission systems. IET Power Electronics, 2019, 12, 607-619.	2.1	8
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	Mechanical Field Weakening Techniques for an Axial Flux Machine. , 2019, , .		2
58	Fault Tolerant Online Condition Monitor of DC-Link Capacitor for Open-end Winding Machine. , 2019, , .		2
59	Photovoltaic Power Generation with Module-Based Capacitive Energy Storage. , 2019, , .		0
60	An Intelligent Pass-Through Algorithm for Non-Inverting Buck-Boost Solar Power Optimizers. , 2019, , .		4
61	Low cost desalination of brackish groundwaters by Capacitive Deionization (CDI) â€œ Implications for irrigated agriculture. Desalination, 2019, 453, 37-53.	8.2	40
62	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
63	Studies on dynamic responses and impedance of the vanadium redox flow battery. Applied Energy, 2019, 237, 91-102.	10.1	24
64	Control Design for Photovoltaic Power Optimizers Using Bootstrap Circuit. IEEE Transactions on Energy Conversion, 2019, 34, 232-242.	5.2	11
65	Postfault Zero-Sequence Current Injection for Open-Circuit Diode/Switch Failure in Open-End Winding PMSM Machines. IEEE Transactions on Industrial Electronics, 2019, 66, 5124-5132.	7.9	27
66	Feedback Linearization Control in Photovoltaic Module Integrated Converters. IEEE Transactions on Power Electronics, 2019, 34, 6876-6889.	7.9	49
67	Analysis and Mitigation of Oscillations in Bi-directional CLLC Resonant Converters. , 2019, , .		0
68	Practical distributed voltage control method for efficient and equitable intervention of distributed devices. IET Smart Grid, 2019, 2, 399-406.	2.2	1
69	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
70	Design of Optimal Winding Configurations for Symmetrical Multiphase Concentrated-Wound Surface-Mount PMSMs to Achieve Maximum Torque Density Under Current Harmonic Injection. IEEE Transactions on Industrial Electronics, 2018, 65, 1751-1761.	7.9	31
71	Model Predictive Control for DCâ€œDC Boost Converters With Reduced-Prediction Horizon and Constant Switching Frequency. IEEE Transactions on Power Electronics, 2018, 33, 9064-9075.	7.9	120
72	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

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73	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
74	A Simple Smooth Transition Technique for the Noninverting Buck-Boost Converter. <i>IEEE Transactions on Power Electronics</i> , 2018, 33, 4906-4915.	7.9	57
75	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
76	Operation of Autonomous AC Microgrid at Constant Frequency and with Reactive Power Generation from Grid-forming, Grid-supporting and Grid-feeding Generators. , 2018, , .		12
77	Existence of Sinusoidal Orbits of a Nonlinear Proportional and Resonant Current Regulator for Islanded Microgrids. , 2018, , .		1
78	Simultaneous Regulation of Active and Reactive Output Power of Parallel-Connected Virtual Oscillator Controlled Inverters. , 2018, , .		5
79	Torque Ripple Suppression for Open-End Multi-Phase PMSMs Operating Under Open-Phase Faults. , 2018, , .		5
80	Output Power Regulation of a Virtual Oscillator Controlled Inverter. , 2018, , .		11
81	Similarities Between Virtual Oscillator Controlled and Droop Controlled Three-Phase Inverters. , 2018, , .		7
82	Lossless bi-directional current sense circuit for low-voltage high-current DC/DC converters. , 2018, , .		4
83	Protection of inverter-based microgrids from ground faults by an innovative directional element. <i>IET Generation, Transmission and Distribution</i> , 2018, 12, 5918-5927.	2.5	10
84	Integration of photovoltaic energy supply with membrane capacitive deionization (MCDI) for salt removal from brackish waters. <i>Water Research</i> , 2018, 147, 276-286.	11.3	94
85	Modified MPC with extended VVs for grid-connected rectifier. <i>IET Power Electronics</i> , 2018, 11, 1926-1936.	2.1	20
86	An Interleaved Boost Inverter Based Battery-Supercapacitor Hybrid Energy Storage System with a Reduced Number of Current Sensors. , 2018, , .		0
87	Model Predictive Control of a Multi-String LCL-Type Grid-Connected H-NPC PV Converter. , 2018, , .		1
88	Charging Control of Vanadium Redox Battery Based Energy Storage Systems with Variable Input Power. , 2018, , .		6
89	Multi-Timescale Model Predictive Control of Battery Energy Storage System Using Conic Relaxation in Smart Distribution Grids. <i>IEEE Transactions on Power Systems</i> , 2018, 33, 7152-7161.	6.5	60
90	A Novel High-Resolution Optical Encoder With Axially Stacked Coded Disk for Modular Joints: Physical Modeling and Experimental Validation. <i>IEEE Sensors Journal</i> , 2018, 18, 6001-6008.	4.7	17

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91	Enhanced Flat-Topped Modulation for MMC Control in HVDC Transmission Systems. IEEE Transactions on Power Delivery, 2017, 32, 152-161.	4.3	38
92	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
93	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
94	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
95	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
96	Feedback linearization control of non-inverting buck-boost PV power optimizers. , 2017, , .		4
97	Comparative study of multicore planar transformers on printed circuit boards. IET Power Electronics, 2017, 10, 1452-1460.	2.1	2
98	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
99	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
100	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
101	Analytical Modeling of Armature Reaction Air-Gap Flux Density Considering the Non-Homogeneously Saturated Rotor in a Fractional-Slot Concentrated-Wound IPM Machine. IEEE Transactions on Magnetics, 2017, 53, 1-12.	2.1	31
102	New Efficient Submodule for a Modular Multilevel Converter in Multiterminal HVDC Networks. IEEE Transactions on Power Electronics, 2017, 32, 4258-4278.	7.9	70
103	A cascaded boost inverter based battery energy storage system with reduced battery ripple current. , 2017, , .		3
104	Airgap magnetic field estimation for IPM rotors considering their non-uniform local saturation. , 2017, , .		2
105	Thermal modelling for demand response of residential buildings. , 2017, , .		3
106	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
107	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
108	Maximum PV generation estimation method for residential low voltage feeders. Sustainable Energy, Grids and Networks, 2016, 7, 58-69.	3.9	31

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109	Design of cascaded control loop for solar power optimizer based on a buck-boost converter. , 2016, , .		4
110	Modeling a DC-current-controlled variable inductance and its application to grid-tied converters. , 2016, , .		1
111	Optimal, Combined Speed, and Direct Thrust Control of Linear Permanent Magnet Synchronous Motors. IEEE Transactions on Energy Conversion, 2016, 31, 947-958.	5.2	33
112	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
113	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
114	Planar PCB Transformer Model for Circuit Simulation. IEEE Transactions on Magnetics, 2016, 52, 1-4.	2.1	9
115	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
116	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
117	Space Vector PWM Techniques for Three-to-Five-Phase Indirect Matrix Converter in the Overmodulation Region. IEEE Transactions on Industrial Electronics, 2016, 63, 550-561.	7.9	32
118	Implementation of a Nonlinear Planar Magnetics Model. IEEE Transactions on Power Electronics, 2016, 31, 6534-6542.	7.9	10
119	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
120	Ring DC node configurations for enhanced DC fault protection in multiterminal HVDC networks. , 2015, , .		1
121	A Power-electronics-based Modular Nanosecond Pulse Generation System for Plasma-assisted Ignition. IEJ Journal of Industry Applications, 2015, 4, 227-234.	1.1	0
122	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
123	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
124	LPV controllers for a DFIG in a microgrid under unbalanced conditions. , 2015, , .		0
125	High-Frequency Planar Transformer Parameter Estimation. IEEE Transactions on Magnetics, 2015, 51, 1-4.	2.1	29
126	Electromagnetic and thermal characterisation of PCB planar transformer. , 2015, , .		4

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127	Autonomous micro-grid operation by employing weak droop control and PQ control. , 2014, , .		13
128	Analysis of common mode voltage using carrier-based method for dual-inverter open-end winding. , 2014, , .		4
129	Overmodulation techniques for the three-to-five phase indirect matrix converter with space vector PWM. , 2014, , .		2
130	Sensorless control of linear permanent magnet synchronous motors using a combined sliding mode adaptive observer. , 2014, , .		6
131	Space vector PWM for three-to-five phase indirect matrix converters with d - and q -axis vector elimination. , 2013, , .		5
132	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
133	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
134	Electrical power engineering education at UNSW. , 2013, , .		1
135	Analysis of the limitations of conventional direct thrust control scheme for linear permanent magnet synchronous motors. , 2013, , .		2
136	Sensorless vector control of linear permanent magnet synchronous motor. , 2013, , .		7
137	Space vector PWM for five-to-three phase conventional matrix converter with d - and q -axis vector elimination. , 2013, , .		1
138	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
139	Performance of three- and five-phase PM-based wind generators under rectifier diode failures. , 2011, , .		6