Juan C Vasquez

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/637561/publications.pdf

Version: 2024-02-01

467 papers	30,843 citations	6613 79 h-index	5394 164 g-index
470 all docs	470 docs citations	470 times ranked	11631 citing authors

#	Article	IF	Citations
1	Hierarchical Control of Droop-Controlled AC and DC Microgridsâ€"A General Approach Toward Standardization. IEEE Transactions on Industrial Electronics, 2011, 58, 158-172.	7.9	3,811
2	DC Microgridsâ€"Part II: A Review of Power Architectures, Applications, and Standardization Issues. IEEE Transactions on Power Electronics, 2016, 31, 3528-3549.	7.9	974
3	Distributed Secondary Control for Islanded Microgridsâ€"A Novel Approach. IEEE Transactions on Power Electronics, 2014, 29, 1018-1031.	7.9	854
4	An Improved Droop Control Method for DC Microgrids Based on Low Bandwidth Communication With DC Bus Voltage Restoration and Enhanced Current Sharing Accuracy. IEEE Transactions on Power Electronics, 2014, 29, 1800-1812.	7.9	837
5	DC Microgridsâ€"Part I: A Review of Control Strategies and Stabilization Techniques. IEEE Transactions on Power Electronics, 2015, , 1-1.	7.9	827
6	Secondary Frequency and Voltage Control of Islanded Microgrids via Distributed Averaging. IEEE Transactions on Industrial Electronics, 2015, 62, 7025-7038.	7.9	760
7	Control Strategy for Flexible Microgrid Based on Parallel Line-Interactive UPS Systems. IEEE Transactions on Industrial Electronics, 2009, 56, 726-736.	7.9	680
8	Supervisory Control of an Adaptive-Droop Regulated DC Microgrid With Battery Management Capability. IEEE Transactions on Power Electronics, 2014, 29, 695-706.	7.9	636
9	State-of-Charge Balance Using Adaptive Droop Control for Distributed Energy Storage Systems in DC Microgrid Applications. IEEE Transactions on Industrial Electronics, 2014, 61, 2804-2815.	7.9	603
10	Three-Phase PLLs: A Review of Recent Advances. IEEE Transactions on Power Electronics, 2017, 32, 1894-1907.	7.9	562
11	Modeling, Analysis, and Design of Stationary-Reference-Frame Droop-Controlled Parallel Three-Phase Voltage Source Inverters. IEEE Transactions on Industrial Electronics, 2013, 60, 1271-1280.	7.9	559
12	Adaptive Droop Control Applied to Voltage-Source Inverters Operating in Grid-Connected and Islanded Modes. IEEE Transactions on Industrial Electronics, 2009, 56, 4088-4096.	7.9	504
13	Secondary Control Scheme for Voltage Unbalance Compensation in an Islanded Droop-Controlled Microgrid. IEEE Transactions on Smart Grid, 2012, 3, 797-807.	9.0	425
14	An Islanding Microgrid Power Sharing Approach Using Enhanced Virtual Impedance Control Scheme. IEEE Transactions on Power Electronics, 2013, 28, 5272-5282.	7.9	408
15	Hierarchical Control of Intelligent Microgrids. IEEE Industrial Electronics Magazine, 2010, 4, 23-29.	2.6	370
16	Hierarchical Control for Multiple DC-Microgrids Clusters. IEEE Transactions on Energy Conversion, 2014, 29, 922-933.	5.2	338
17	Hierarchical Control of Parallel AC-DC Converter Interfaces for Hybrid Microgrids. IEEE Transactions on Smart Grid, 2014, 5, 683-692.	9.0	327
18	Microgrid supervisory controllers and energy management systems: A literature review. Renewable and Sustainable Energy Reviews, 2016, 60, 1263-1273.	16.4	323

#	Article	IF	Citations
19	Secondary Control for Voltage Quality Enhancement in Microgrids. IEEE Transactions on Smart Grid, 2012, 3, 1893-1902.	9.0	316
20	Single-Phase PLLs: A Review of Recent Advances. IEEE Transactions on Power Electronics, 2017, 32, 9013-9030.	7.9	300
21	Advanced LVDC Electrical Power Architectures and Microgrids: A step toward a new generation of power distribution networks. IEEE Electrification Magazine, 2014, 2, 54-65.	1.8	286
22	Autonomous Voltage Unbalance Compensation in an Islanded Droop-Controlled Microgrid. IEEE Transactions on Industrial Electronics, 2013, 60, 1390-1402.	7.9	285
23	Double-Quadrant State-of-Charge-Based Droop Control Method for Distributed Energy Storage Systems in Autonomous DC Microgrids. IEEE Transactions on Smart Grid, 2015, 6, 147-157.	9.0	282
24	Flexible Voltage Support Control for Three-Phase Distributed Generation Inverters Under Grid Fault. IEEE Transactions on Industrial Electronics, 2013, 60, 1429-1441.	7.9	280
25	Microgrids: Experiences, barriers and success factors. Renewable and Sustainable Energy Reviews, 2014, 40, 659-672.	16.4	280
26	Voltage Support Provided by a Droop-Controlled Multifunctional Inverter. IEEE Transactions on Industrial Electronics, 2009, 56, 4510-4519.	7.9	279
27	Intelligent Distributed Generation and Storage Units for DC Microgridsâ€”A New Concept on Cooperative Control Without Communications Beyond Droop Control. IEEE Transactions on Smart Grid, 2014, 5, 2476-2485.	9.0	256
28	Next-Generation Shipboard DC Power System: Introduction Smart Grid and dc Microgrid Technologies into Maritime Electrical Netowrks. IEEE Electrification Magazine, 2016, 4, 45-57.	1.8	255
29	Stability Enhancement Based on Virtual Impedance for DC Microgrids With Constant Power Loads. IEEE Transactions on Smart Grid, 2015, 6, 2770-2783.	9.0	250
30	Mixed-Integer-Linear-Programming-Based Energy Management System for Hybrid PV-Wind-Battery Microgrids: Modeling, Design, and Experimental Verification. IEEE Transactions on Power Electronics, 2017, 32, 2769-2783.	7.9	235
31	Reactive Power Sharing and Voltage Harmonic Distortion Compensation of Droop Controlled Single Phase Islanded Microgrids. IEEE Transactions on Smart Grid, 2014, 5, 1149-1158.	9.0	228
32	Virtual Impedance Loop for Droop-Controlled Single-Phase Parallel Inverters Using a Second-Order General-Integrator Scheme. IEEE Transactions on Power Electronics, 2010, 25, 2993-3002.	7.9	225
33	Microgrids: Hierarchical Control and an Overview of the Control and Reserve Management Strategies. IEEE Industrial Electronics Magazine, 2013, 7, 42-55.	2.6	220
34	Autonomous Active Power Control for Islanded AC Microgrids With Photovoltaic Generation and Energy Storage System. IEEE Transactions on Energy Conversion, 2014, 29, 882-892.	5.2	215
35	Robust Networked Control Scheme for Distributed Secondary Control of Islanded Microgrids. IEEE Transactions on Industrial Electronics, 2014, 61, 5363-5374.	7.9	211
36	A Control Architecture to Coordinate Renewable Energy Sources and Energy Storage Systems in Islanded Microgrids. IEEE Transactions on Smart Grid, 2015, 6, 1156-1166.	9.0	193

#	Article	IF	Citations
37	Modeling and Sensitivity Study of Consensus Algorithm-Based Distributed Hierarchical Control for DC Microgrids. IEEE Transactions on Smart Grid, 2016, 7, 1504-1515.	9.0	190
38	Small-Signal Analysis of the Microgrid Secondary Control Considering a Communication Time Delay. IEEE Transactions on Industrial Electronics, 2016, 63, 6257-6269.	7.9	171
39	Centralized Control Architecture for Coordination of Distributed Renewable Generation and Energy Storage in Islanded AC Microgrids. IEEE Transactions on Power Electronics, 2017, 32, 5202-5213.	7.9	171
40	Intelligent DC Homes in Future Sustainable Energy Systems: When efficiency and intelligence work together. IEEE Consumer Electronics Magazine, 2016, 5, 74-80.	2.3	166
41	Coordinated Control Based on Bus-Signaling and Virtual Inertia for Islanded DC Microgrids. IEEE Transactions on Smart Grid, 2015, 6, 2627-2638.	9.0	162
42	Distributed Voltage Unbalance Compensation in Islanded Microgrids by Using a Dynamic Consensus Algorithm. IEEE Transactions on Power Electronics, 2016, 31, 827-838.	7.9	161
43	Selective Harmonic-Compensation Control for Single-Phase Active Power Filter With High Harmonic Rejection. IEEE Transactions on Industrial Electronics, 2009, 56, 3117-3127.	7.9	160
44	A Distributed Control Strategy for Coordination of an Autonomous LVDC Microgrid Based on Power-Line Signaling. IEEE Transactions on Industrial Electronics, 2014, 61, 3313-3326.	7.9	152
45	Power Flow Analysis for Low-Voltage AC and DC Microgrids Considering Droop Control and Virtual Impedance. IEEE Transactions on Smart Grid, 2017, 8, 2754-2764.	9.0	146
46	Distributed Nonlinear Control With Event-Triggered Communication to Achieve Current-Sharing and Voltage Regulation in DC Microgrids. IEEE Transactions on Power Electronics, 2018, 33, 6416-6433.	7.9	142
47	Modeling, Tuning, and Performance Comparison of Second-Order-Generalized-Integrator-Based FLLs. IEEE Transactions on Power Electronics, 2018, 33, 10229-10239.	7.9	141
48	Voltage-Level Selection of Future Two-Level LVdc Distribution Grids: A Compromise Between Grid Compatibiliy, Safety, and Efficiency. IEEE Electrification Magazine, 2016, 4, 20-28.	1.8	137
49	A Decentralized Control Architecture Applied to DC Nanogrid Clusters for Rural Electrification in Developing Regions. IEEE Transactions on Power Electronics, 2019, 34, 1773-1785.	7.9	130
50	A Decentralized Scalable Approach to Voltage Control of DC Islanded Microgrids. IEEE Transactions on Control Systems Technology, 2016, 24, 1965-1979.	5.2	129
51	Single-Phase Frequency-Locked Loops: A Comprehensive Review. IEEE Transactions on Power Electronics, 2019, 34, 11791-11812.	7.9	129
52	Multiagent-Based Distributed State of Charge Balancing Control for Distributed Energy Storage Units in AC Microgrids. IEEE Transactions on Industry Applications, 2017, 53, 2369-2381.	4.9	125
53	A Multi-Functional Fully Distributed Control Framework for AC Microgrids. IEEE Transactions on Smart Grid, 2018, 9, 3247-3258.	9.0	123
54	Model Order Reductions for Stability Analysis of Islanded Microgrids With Droop Control. IEEE Transactions on Industrial Electronics, 2015, 62, 4344-4354.	7.9	121

#	Article	IF	Citations
55	Adaptive protection combined with machine learning for microgrids. IET Generation, Transmission and Distribution, 2019, 13, 770-779.	2.5	115
56	Tertiary and Secondary Control Levels for Efficiency Optimization and System Damping in Droop Controlled DCâ€“DC Converters. IEEE Transactions on Smart Grid, 2015, 6, 2615-2626.	9.0	110
57	An overview of power quality enhancement techniques applied to distributed generation in electrical distribution networks. Renewable and Sustainable Energy Reviews, 2018, 93, 201-214.	16.4	109
58	A Spring Search Algorithm Applied to Engineering Optimization Problems. Applied Sciences (Switzerland), 2020, 10, 6173.	2.5	105
59	Economic Dispatch for Operating Cost Minimization Under Real-Time Pricing in Droop-Controlled DC Microgrid. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2017, 5, 587-595.	5.4	104
60	Tertiary Control of Voltage Unbalance Compensation for Optimal Power Quality in Islanded Microgrids. IEEE Transactions on Energy Conversion, 2014, 29, 802-815.	5.2	102
61	Hierarchical control of droop-controlled DC and AC microgrids â€” a general approach towards standardization. , 2009, , .		101
62	Brief Survey on Attack Detection Methods for Cyber-Physical Systems. IEEE Systems Journal, 2020, 14, 5329-5339.	4.6	101
63	Distributed Active Synchronization Strategy for Microgrid Seamless Reconnection to the Grid Under Unbalance and Harmonic Distortion. IEEE Transactions on Smart Grid, 2015, 6, 2757-2769.	9.0	98
64	Improved Direct Power Control for Grid-Connected Voltage Source Converters. IEEE Transactions on Industrial Electronics, 2018, 65, 8041-8051.	7.9	97
65	Efficient energy management for a gridâ€tied residential microgrid. IET Generation, Transmission and Distribution, 2017, 11, 2752-2761.	2.5	96
66	Power Management Strategy Based on Virtual Inertia for DC Microgrids. IEEE Transactions on Power Electronics, 2020, 35, 12472-12485.	7.9	93
67	Energy Storage Systems for Shipboard Microgridsâ€”A Review. Energies, 2018, 11, 3492.	3.1	92
68	A Hankel Matrix Based Reduced Order Model for Stability Analysis of Hybrid Power System Using PSO-GSA Optimized Cascade PI-PD Controller for Automatic Load Frequency Control. IEEE Access, 2020, 8, 71422-71446.	4.2	92
69	A New Way of Controlling Parallel-Connected Inverters by Using Synchronous-Reference-Frame Virtual Impedance Loopâ€”Part I: Control Principle. IEEE Transactions on Power Electronics, 2016, 31, 4576-4593.	7.9	91
70	A Circulating-Current Suppression Method for Parallel-Connected Voltage-Source Inverters With Common DC and AC Buses. IEEE Transactions on Industry Applications, 2017, 53, 3758-3769.	4.9	88
71	Containment and Consensus-Based Distributed Coordination Control to Achieve Bounded Voltage and Precise Reactive Power Sharing in Islanded AC Microgrids. IEEE Transactions on Industry Applications, 2017, 53, 5187-5199.	4.9	88
72	Online Energy Management Systems for Microgrids: Experimental Validation and Assessment Framework. IEEE Transactions on Power Electronics, 2018, 33, 2201-2215.	7.9	87

#	Article	IF	Citations
73	A Microgrid Energy Management System Based on Non-Intrusive Load Monitoring via Multitask Learning. IEEE Transactions on Smart Grid, 2021, 12, 977-987.	9.0	87
74	A Control Algorithm for Electric Vehicle Fast Charging Stations Equipped With Flywheel Energy Storage Systems. IEEE Transactions on Power Electronics, 2016, 31, 6674-6685.	7.9	86
75	A Study on Three-Phase FLLs. IEEE Transactions on Power Electronics, 2019, 34, 213-224.	7.9	84
76	Low-Voltage Ride-Through Operation of Power Converters in Grid-Interactive Microgrids by Using Negative-Sequence Droop Control. IEEE Transactions on Power Electronics, 2017, 32, 3128-3142.	7.9	83
77	Investigation of Nonlinear Droop Control in DC Power Distribution Systems: Load Sharing, Voltage Regulation, Efficiency, and Stability. IEEE Transactions on Power Electronics, 2019, 34, 9404-9421.	7.9	83
78	A Decentralized Current-Sharing Controller Endows Fast Transient Response to Parallel DCâ€“DC Converters. IEEE Transactions on Power Electronics, 2018, 33, 4362-4372.	7.9	82
79	An Islanding Detection Method by Using Frequency Positive Feedback Based on FLL for Single-Phase Microgrid. IEEE Transactions on Smart Grid, 2017, 8, 1821-1830.	9.0	81
80	Analysis and Comparison of Notch Filter and Capacitor Voltage Feedforward Active Damping Techniques for LCL Grid-Connected Converters. IEEE Transactions on Power Electronics, 2019, 34, 3958-3972.	7.9	81
81	Smart Inverters for Microgrid Applications: A Review. Energies, 2019, 12, 840.	3.1	79
82	Digitalization and decentralization driving transactive energy Internet: Key technologies and infrastructures. International Journal of Electrical Power and Energy Systems, 2021, 126, 106593.	5.5	78
83	A Review of DC Shipboard Microgridsâ€”Part I: Power Architectures, Energy Storage, and Power Converters. IEEE Transactions on Power Electronics, 2022, 37, 5155-5172.	7.9	78
84	An MPC-Based ESS Control Method for PV Power Smoothing Applications. IEEE Transactions on Power Electronics, 2018, 33, 2136-2144.	7.9	75
85	Energy management system optimization in islanded microgrids: An overview and future trends. Renewable and Sustainable Energy Reviews, 2021, 149, 111327.	16.4	75
86	A Control Architecture to Coordinate Distributed Generators and Active Power Filters Coexisting in a Microgrid. IEEE Transactions on Smart Grid, 2016, 7, 2325-2336.	9.0	70
87	A Critical Examination of Frequency-Fixed Second-Order Generalized Integrator-Based Phase-Locked Loops. IEEE Transactions on Power Electronics, 2017, 32, 6666-6672.	7.9	70
88	Multirate Fractional-Order Repetitive Control of Shunt Active Power Filter Suitable for Microgrid Applications. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2017, 5, 809-819.	5.4	70
89	Standard SOGI-FLL and Its Close Variants: Precise Modeling in LTP Framework and Determining Stability Region/Robustness Metrics. IEEE Transactions on Power Electronics, 2021, 36, 409-422.	7.9	70
90	An overview of low voltage DC distribution systems for residential applications. , 2015, , .		69

#	Article	IF	Citations
91	Passivity-Based Design of Plug-and-Play Current-Controlled Grid-Connected Inverters. IEEE Transactions on Power Electronics, 2020, 35, 2135-2150.	7.9	69
92	Microgrid Digital Twins: Concepts, Applications, and Future Trends. IEEE Access, 2022, 10, 2284-2302.	4.2	68
93	Flywheel-Based Distributed Bus Signalling Strategy for the Public Fast Charging Station. IEEE Transactions on Smart Grid, 2014, 5, 2825-2835.	9.0	67
94	Internet of Things for Modern Energy Systems: State-of-the-Art, Challenges, and Open Issues. Energies, 2018, 11, 1252.	3.1	67
95	A Voltage Modulated DPC Approach for Three-Phase PWM Rectifier. IEEE Transactions on Industrial Electronics, 2018, 65, 7612-7619.	7.9	65
96	An Enhanced State Observer for DC-Link Voltage Control of Three-Phase AC/DC Converters. IEEE Transactions on Power Electronics, 2018, 33, 936-942.	7.9	65
97	Distributed secondary control for islanded MicroGrids - A networked control systems approach. , 2012, , .		64
98	Cooperative energy management for a cluster of households prosumers. IEEE Transactions on Consumer Electronics, 2016, 62, 235-242.	3.6	63
99	SoC-based droop method for distributed energy storage in DC microgrid applications. , 2012, , .		62
100	Optimal allocation for combined heat and power system with respect to maximum allowable capacity for reduced losses and improved voltage profile and reliability of microgrids considering loading condition. Energy, 2020, 196, 117124.	8.8	62
101	Dynamic consensus algorithm based distributed global efficiency optimization of a droop controlled DC microgrid. , 2014, , .		61
102	Passivity-based coordinated control for islanded AC microgrid. Applied Energy, 2018, 229, 551-561.	10.1	61
103	Modeling, stability analysis and active stabilization of multiple DC-microgrid clusters. , 2014, , .		60
104	Frequency Stability of Hierarchically Controlled Hybrid Photovoltaic-Battery-Hydropower Microgrids. IEEE Transactions on Industry Applications, 2015, 51, 4729-4742.	4.9	59
105	All-Pass-Filter-Basedâ€‰PLLâ€‰Systems:â€‰Linearâ€‰Modeling, Analysis, and Comparative Evaluation. IEEE Transactions on Power Electronics, 2020, 35, 3558-3572.	7.9	56
106	Large-Signal Stability Improvement of DC-DC Converters in DC Microgrid. IEEE Transactions on Energy Conversion, 2021, 36, 2534-2544.	5.2	56
107	Microgrid central controller development and hierarchical control implementation in the intelligent microgrid lab of Aalborg University. , 2015, , .		55
108	Optimization-Based Power and Energy Management System in Shipboard Microgrid: A Review. IEEE Systems Journal, 2022, 16, 578-590.	4.6	55

#	Article	IF	Citations
109	A Review of DC Shipboard Microgridsâ€"Part II: Control Architectures, Stability Analysis, and Protection Schemes. IEEE Transactions on Power Electronics, 2022, 37, 4105-4120.	7.9	54
110	Scalable Solar dc Micrigrids: On the Path to Revolutionizing the Electrification Architecture of Developing Communities. IEEE Electrification Magazine, 2018, 6, 63-72.	1.8	52
111	Power flow modeling of islanded AC microgrids with hierarchical control. International Journal of Electrical Power and Energy Systems, 2019, 105, 28-36.	5.5	52
112	Towards collective energy Community: Potential roles of microgrid and blockchain to go beyond P2P energy trading. Applied Energy, 2022, 314, 119003.	10.1	52
113	A Communication-Less Distributed Control Architecture for Islanded Microgrids With Renewable Generation and Storage. IEEE Transactions on Power Electronics, 2018, 33, 1922-1939.	7.9	49
114	Recent Developments and Challenges on AC Microgrids Fault Detection and Protection Systemsâ€"A Review. Energies, 2020, 13, 2149.	3.1	49
115	Steady-State Linear Kalman Filter-Based PLLs for Power Applications: A Second Look. IEEE Transactions on Industrial Electronics, 2018, 65, 9795-9800.	7.9	48
116	A Dynamic Consensus Algorithm to Adjust Virtual Impedance Loops for Discharge Rate Balancing of AC Microgrid Energy Storage Units. IEEE Transactions on Smart Grid, 2018, 9, 4847-4860.	9.0	48
117	Passivity-Based Design of Grid-Side Current-Controlled LCL-Type Grid-Connected Inverters. IEEE Transactions on Power Electronics, 2020, 35, 9813-9823.	7.9	48
118	Power management techniques for grid-connected DC microgrids: A comparative evaluation. Applied Energy, 2020, 269, 115057.	10.1	47
119	Decentralized transactive energy community in edge grid with positive buildings and interactive electric vehicles. International Journal of Electrical Power and Energy Systems, 2022, 135, 107510.	5.5	47
120	Virtual Admittance Loop for Voltage Harmonic Compensation in Microgrids. IEEE Transactions on Industry Applications, 2016, 52, 3348-3356.	4.9	46
121	Mode-triggered droop method for the decentralized energy management of an islanded hybrid PV/hydrogen/battery DC microgrid. Energy, 2020, 199, 117441.	8.8	46
122	A True Open-Loop Synchronization Technique. IEEE Transactions on Industrial Informatics, 2016, 12, 1093-1103.	11.3	45
123	An Adaptive Resonant Regulator for Single-Phase Grid-Tied VSCs. IEEE Transactions on Power Electronics, 2018, 33, 1867-1873.	7.9	45
124	Pinning-Based Hierarchical and Distributed Cooperative Control for AC Microgrid Clusters. IEEE Transactions on Power Electronics, 2020, 35, 9865-9885.	7.9	45
125	dq-Frame Impedance Modeling of Three-Phase Grid-Tied Voltage Source Converters Equipped With Advanced PLLs. IEEE Transactions on Power Electronics, 2021, 36, 3524-3539.	7.9	45
126	System-Level Large-Signal Stability Analysis of Droop-Controlled DC Microgrids. IEEE Transactions on Power Electronics, 2021, 36, 4224-4236.	7.9	45

#	Article	IF	Citations
127	Selective compensation of voltage harmonics in grid-connected microgrids. Mathematics and Computers in Simulation, 2013, 91, 211-228.	4.4	42
128	Multiagent based distributed control for state-of-charge balance of distributed energy storage in DC microgrids. , 2014, , .		42
129	A New â€œDoctor and Patientâ€•Optimization Algorithm: An Application to Energy Commitment Problem. Applied Sciences (Switzerland), 2020, 10, 5791.	2.5	42
130	Coordinated Secondary Control for Balanced Discharge Rate of Energy Storage System in Islanded AC Microgrids. IEEE Transactions on Industry Applications, 2016, 52, 5019-5028.	4.9	41
131	Hybrid Adaptive/Nonadaptive Delayed Signal Cancellation-Based Phase-Locked Loop. IEEE Transactions on Industrial Electronics, 2017, 64, 470-479.	7.9	41
132	Overload and Short-Circuit Protection Strategy for Voltage Source Inverter-Based UPS. IEEE Transactions on Power Electronics, 2019, 34, 11371-11382.	7.9	41
133	Stochastic Predictive Energy Management of Multi-Microgrid Systems. Applied Sciences (Switzerland), 2020, 10, 4833.	2.5	41
134	A comprehensive overview of framework for developing sustainable energy internet: From things-based energy network to services-based management system. Renewable and Sustainable Energy Reviews, 2021, 150, 111409.	16.4	41
135	P2P energy trading: Blockchain-enabled P2P energy society with multi-scale flexibility services. Energy Reports, 2022, 8, 3614-3628.	5.1	41
136	Distributed consensus-based control of multiple DC-microgrids clusters. , 2014, , .		40
137	Flexible System Integration and Advanced Hierarchical Control Architectures in the Microgrid Research Laboratory of Aalborg University. IEEE Transactions on Industry Applications, 2015, , 1-1.	4.9	40
138	DAVIC: A New Distributed Adaptive Virtual Impedance Control for Parallel-Connected Voltage Source Inverters in Modular UPS System. IEEE Transactions on Power Electronics, 2019, 34, 5953-5968.	7.9	40
139	Protection of AC and DC microgrids: Challenges, solutions and future trends. , 2015, , .		39
140	A GPS-Based Control Framework for Accurate Current Sharing and Power Quality Improvement in Microgrids. IEEE Transactions on Power Electronics, 2017, 32, 5675-5687.	7.9	39
141	Triangle Carrier-Based DPWM for Three-Level NPC Inverters. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2018, 6, 1966-1978.	5.4	39
142	Extended-Optimal-Power-Flow-Based Hierarchical Control for Islanded AC Microgrids. IEEE Transactions on Power Electronics, 2019, 34, 840-848.	7.9	39
143	A Non-Isolated High Step-Up DC-DC Converter Using Voltage Lift Technique: Analysis, Design, and Implementation. IEEE Access, 2022, 10, 6338-6347.	4.2	39
144	Gibbs distribution analysis of temporal correlations structure in retina ganglion cells. Journal of Physiology (Paris), 2012, 106, 120-127.	2.1	38

#	Article	IF	Citations
145	Control Architecture for Parallel Inverter in Uninterruptible Power Systems - Part I: Control Design and Experimental Results. IEEE Transactions on Power Electronics, 2015, , 1-1.	7.9	38
146	DCOffset Rejection in Phase-locked loops: A Novel Approach. IEEE Transactions on Industrial Electronics, 2016, , 1-1.	7.9	37
147	A Nonadaptive Window-Based PLL for Single-Phase Applications. IEEE Transactions on Power Electronics, 2018, 33, 24-31.	7.9	37
148	A Linear Quadratic Regulator With Optimal Reference Tracking for Three-Phase Inverter-Based Islanded Microgrids. IEEE Transactions on Power Electronics, 2021, 36, 7112-7122.	7.9	37
149	New Challenges in the Design of Microgrid Systems: Communication Networks, Cyberattacks, and Resilience. IEEE Electrification Magazine, 2020, 8, 98-106.	1.8	37
150	Modeling, analysis, and design of stationary reference frame droop controlled parallel three-phase voltage source inverters. , 2011, , .		36
151	A Root-Locus Design Methodology Derived From the Impedance/Admittance Stability Formulation and Its Application for LCL Grid-Connected Converters in Wind Turbines. IEEE Transactions on Power Electronics, 2017, 32, 8218-8228.	7.9	36
152	Performance improvement of shunt active power filter based on non-linear least-square approach. Electric Power Systems Research, 2018, 160, 44-55.	3.6	36
153	An Open-Loop Grid Synchronization Approach for Single-Phase Applications. IEEE Transactions on Power Electronics, 2018, 33, 5548-5555.	7.9	36
154	Dynamic Assessment of COTS Converters-Based DC Integrated Power Systems in Electric Ships. IEEE Transactions on Industrial Informatics, 2018, 14, 5518-5529.	11.3	36
155	Fuzzy-logic-based gain-scheduling control for state-of-charge balance of distributed energy storage systems for DC microgrids. , 2014, , .		35
156	Distributed Average Integral Secondary Control for Modular UPS Systems-Based Microgrids. IEEE Transactions on Power Electronics, 2019, 34, 6922-6936.	7.9	35
157	Grid simulator for power quality assessment of microâ€grids. IET Power Electronics, 2013, 6, 700-709.	2.1	34
158	Research On Variable-Length Transfer Delay and Delayed-Signal-Cancellation-Based PLLs. IEEE Transactions on Power Electronics, 2018, 33, 8388-8398.	7.9	34
159	Single-Phase FLLs Based on Linear Kalman Filter, Limit-Cycle Oscillator, and Complex Bandpass Filter: Analysis and Comparison With a Standard FLL in Grid Applications. IEEE Transactions on Power Electronics, 2019, 34, 11774-11790.	7.9	34
160	Operation Control for Improving Energy Efficiency of Shipboard Microgrid Including Bow Thrusters and Hybrid Energy Storages. IEEE Transactions on Transportation Electrification, 2020, 6, 856-868.	7.8	34
161	Study of large-signal stability of an inverter-based generator using a Lyapunov function. , 2014, , .		33
162	Coordinated Control of a Hybrid-Electric-Ferry Shipboard Microgrid. IEEE Transactions on Transportation Electrification, 2019, 5, 828-839.	7.8	33

#	Article	IF	Citations
163	A Robust and Fast Synchronization Technique for Adverse Grid Conditions. IEEE Transactions on Industrial Electronics, 2017, 64, 3188-3194.	7.9	32
164	A PLL-Based Controller for Three-Phase Grid-Connected Power Converters. IEEE Transactions on Power Electronics, 2018, 33, 911-916.	7.9	32
165	Peer-to-Peer Energy Market for Community Microgrids [Technology Leaders]. IEEE Electrification Magazine, 2018, 6, 102-107.	1.8	32
166	Advanced Single-Phase DSC-Based PLLs. IEEE Transactions on Power Electronics, 2019, 34, 3226-3238.	7.9	32
167	Modeling and Stability Assessment of Single-Phase Grid Synchronization Techniques: Linear Time-Periodic Versus Linear Time-Invariant Frameworks. IEEE Transactions on Power Electronics, 2019, 34, 20-27.	7.9	32
168	Energy Harvesting From Harbor Cranes With Flywheel Energy Storage Systems. IEEE Transactions on Industry Applications, 2019, 55, 3354-3364.	4.9	31
169	Using smart meters data for energy management operations and power quality monitoring in a microgrid. , 2017, , .		30
170	DC-Link Protection and Control in Modular Uninterruptible Power Supply. IEEE Transactions on Industrial Electronics, 2018, 65, 3942-3953.	7.9	30
171	False Data Injection Cyber-Attacks Detection for Multiple DC Microgrid Clusters. Applied Energy, 2022, 310, 118425.	10.1	30
172	Real-time Energy Management System for a hybrid AC/DC residential microgrid. , 2017, , .		29
173	A Voltage Feedback Based Harmonic Compensation Strategy for Current-Controlled Converters. IEEE Transactions on Industry Applications, 2018, 54, 2616-2627.	4.9	29
174	Adaptive droop control applied to distributed generation inverters connected to the grid. , 2008, , .		28
175	Selective harmonic virtual impedance for voltage source inverters with LCL filter in microgrids. , 2012, , .		28
176	Optimization with system damping restoration for droop controlled DC-DC converters. , 2013, , .		28
177	Stabilizing plug-and-play regulators and secondary coordinated control for AC islanded microgrids with bus-connected topology. Applied Energy, 2018, 210, 914-924.	10.1	28
178	A Communication-Less Multimode Control Approach for Adaptive Power Sharing in Ship-Based Seaport Microgrid. IEEE Transactions on Transportation Electrification, 2021, 7, 3070-3082.	7.8	28
179	Energy management system for a hybrid PV-Wind-Tidal-Battery-based islanded DC microgrid: Modeling and experimental validation. Renewable and Sustainable Energy Reviews, 2022, 159, 112093.	16.4	28
180	Adaptive distance protection for microgrids. , 2015, , .		27

#	Article	IF	Citations
181	Multi-agent-based distributed state of charge balancing control for distributed energy storage units in AC microgrids. , 2015, , .		27
182	Adaptive CDSC-Based Open-Loop Synchronization Technique for Dynamic Response Enhancement of Active Power Filters. IEEE Access, 2019, 7, 96743-96752.	4.2	27
183	Using deep learning and meteorological parameters to forecast the photovoltaic generators intra-hour output power interval for smart grid control. Energy, 2022, 239, 122116.	8.8	27
184	AC Microgrid Small-Signal Modeling: Hierarchical Control Structure Challenges and Solutions. IEEE Electrification Magazine, 2019, 7, 81-88.	1.8	26
185	Power flow analysis for droop controlled LV hybrid AC-DC microgrids with virtual impedance. , 2014, , .		25
186	Hierarchical control for multiple DC-microgrids clusters. , 2014, , .		25
187	Intelligent DC Microgrid living Laboratories - A Chinese-Danish cooperation project. , 2015, , .		25
188	Potential energy savings by using direct current for residential applications: A Danish household study case. , 2017, , .		25
189	Matrix pencil methodâ€based reference current generation for shunt active power filters. IET Power Electronics, 2018, 11, 772-780.	2.1	25
190	Phase Compensated Reduced Order Generalized Integrators for Grid-Tied VSCs With Harmonics Compensation Capability. IEEE Transactions on Industry Applications, 2018, 54, 2568-2578.	4.9	25
191	Flat tie-line power scheduling control of grid-connected hybrid microgrids. Applied Energy, 2018, 210, 786-799.	10.1	25
192	Cascaded Multilevel PV Inverter With Improved Harmonic Performance During Power Imbalance Between Power Cells. IEEE Transactions on Industry Applications, 2020, 56, 2788-2798.	4.9	25
193	Power-flow-based energy management of hierarchically controlled islanded AC microgrids. International Journal of Electrical Power and Energy Systems, 2022, 141, 108140.	5.5	25
194	Hierarchical control scheme for voltage Harmonics Compensation in an islanded droop-controlled microgrid. , 2011, , .		24
195	Distance protection for microgrids in distribution system. , 2015, , .		24
196	Multimode Operation for On-Line Uninterruptible Power Supply System. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2019, 7, 1181-1196.	5.4	24
197	An online energy management system for AC/DC residential microgrids supported by non-intrusive load monitoring. Applied Energy, 2022, 307, 118136.	10.1	24
198	Optimal utilization of microgrids supplemented with battery energy storage systems in grid support applications. , 2015, , .		23

#	Article	IF	Citations
199	Adaptive virtual impedance scheme for selective compensation of voltage unbalance and harmonics in microgrids. , 2015, , .		23
200	A Comparative Study of Sliding-Mode Control Schemes for Quantum Series Resonant Inverters. IEEE Transactions on Industrial Electronics, 2009, 56, 3487-3495.	7.9	22
201	Virtual impedance based stability improvement for DC microgrids with constant power loads. , 2014, , .		22
202	Power flow analysis algorithm for islanded LV microgrids including distributed generator units with droop control and virtual impedance loop. , 2014, , .		22
203	An Adaptive Least-Error Squares Filter-Based Phase-Locked Loop for Synchronization and Signal Decomposition Purposes. IEEE Transactions on Industrial Electronics, 2017, 64, 336-346.	7.9	22
204	Economic Power Schedule and Transactive Energy through an Intelligent Centralized Energy Management System for a DC Residential Distribution System. Energies, 2017, 10, 916.	3.1	22
205	Distributed secondary and tertiary controls for lâ€“V droopâ€controlledâ€paralleled DCâ€“DC converters. IET Generation, Transmission and Distribution, 2018, 12, 1538-1546.	2.5	22
206	Optimal sizing and performance evaluation of a renewable energy based microgrid in future seaports. , 2018, , .		22
207	Control of Hybrid Diesel/PV/Battery/Ultra-Capacitor Systems for Future Shipboard Microgrids. Energies, 2019, 12, 3460.	3.1	22
208	A Simple Method for Passivity Enhancement of Current Controlled Grid-Connected Inverters. IEEE Transactions on Power Electronics, 2020, 35, 7735-7741.	7.9	22
209	Harmonic Linearization and Investigation of Three-Phase Parallel-Structured Signal Decomposition Algorithms in Grid-Connected Applications. IEEE Transactions on Power Electronics, 2021, 36, 4198-4213.	7.9	22
210	A Reference-Feedforward-Based Damping Method for Virtual Synchronous Generator Control. IEEE Transactions on Power Electronics, 2022, 37, 7566-7571.	7.9	22
211	A Comprehensive Review on Small Satellite Microgrids. IEEE Transactions on Power Electronics, 2022, 37, 12741-12762.	7.9	22
212	Power quality issues of smart microgrids: applied techniques and decision making analysis. , 2020, , 89-119.		21
213	Demand Response Service Certification and Customer Baseline Evaluation Using Blockchain Technology. IEEE Access, 2020, 8, 139313-139331.	4.2	21
214	Hierarchical control with virtual resistance optimization for efficiency enhancement and State-of-Charge balancing in DC microgrids. , 2015, , .		20
215	Optimized energy management of a single-house residential micro-grid with automated demand response. , 2015, , .		20
216	Delay-Dependent Small-Signal Stability Analysis and Compensation Method for Distributed Secondary Control of Microgrids. IEEE Access, 2019, 7, 170919-170935.	4.2	20

#	Article	IF	Citations
217	Sustainable Rural Electrification Through Solar PV DC Microgridsâ€"An Architecture-Based Assessment. Processes, 2020, 8, 1417.	2.8	20
218	Linear Time-Periodic Modeling, Examination, and Performance Enhancement of Grid Synchronization Systems With DC Component Rejection/Estimation Capability. IEEE Transactions on Power Electronics, 2021, 36, 4237-4253.	7.9	20
219	Resonance damping techniques for grid-connected voltage source converters with LCL filters — A review. , 2014, , .		19
220	Optimal power scheduling for a grid-connected hybrid PV-wind-battery microgrid system. , 2016, , .		19
221	High-Order Frequency-Locked Loops: A Critical Analysis. IEEE Transactions on Power Electronics, 2017, 32, 3285-3291.	7.9	19
222	Power Quality Assessment in Shipboard Microgrids Under Unbalanced and Harmonic AC Bus Voltage. IEEE Transactions on Industry Applications, 2019, 55, 765-775.	4.9	19
223	Is Using A Complex Control Gain in Three-Phase FLLs Reasonable?. IEEE Transactions on Industrial Electronics, 2020, 67, 2480-2484.	7.9	19
224	Accurate proportional power sharing with minimum communication requirements for inverter-based islanded microgrids. International Journal of Electrical Power and Energy Systems, 2020, 121, 106036.	5.5	19
225	Review of Dynamic Positioning Control in Maritime Microgrid Systems. Energies, 2020, 13, 3188.	3.1	19
226	IoT-enabled Microgrid for Intelligent Energy-aware Buildings: A Novel Hierarchical Self-consumption Scheme with Renewables. Electronics (Switzerland), 2020, 9, 550.	3.1	19
227	Passivity Enhancement of Voltage-Controlled Inverters in Grid-Connected Microgrids Considering Negative Aspects of Control Delay and Grid Impedance Variations. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2021, 9, 6637-6649.	5.4	19
228	Space Microgrids for Future Manned Lunar Bases: A Review. IEEE Open Access Journal of Power and Energy, 2021, 8, 570-583.	3.4	19
229	Convergence and Interoperability for the Energy Internet: From Ubiquitous Connection to Distributed Automation. IEEE Industrial Electronics Magazine, 2020, 14, 91-105.	2.6	19
230	Operation Cost Minimization of Droop-Controlled AC Microgrids Using Multiagent-Based Distributed Control. Energies, 2016, 9, 717.	3.1	18
231	Modular <italic>Plugâ€™nâ€™Play</italic> Control Architectures for Three-Phase Inverters in UPS Applications. IEEE Transactions on Industry Applications, 2016, 52, 2405-2414.	4.9	18
232	Coordinated Primary and Secondary Frequency Support Between Microgrid and Weak Grid. IEEE Transactions on Sustainable Energy, 2019, 10, 1718-1730.	8.8	18
233	Attack detection design for dc microgrid using eigenvalue assignment approach. Energy Reports, 2021, 7, 469-476.	5.1	18
234	Operation cost minimization of droop-controlled DC microgrids based on real-time pricing and optimal power flow. , 2015, , .		17

#	Article	IF	Citations
235	Cyberattack Detection for Converter-Based Distributed dc Microgrids: Observer-Based Approaches. IEEE Industrial Electronics Magazine, 2022, 16, 67-77.	2.6	17
236	A Robust Method for Controlling Grid-Connected Inverters in Weak Grids. IEEE Transactions on Circuits and Systems II: Express Briefs, 2021, 68, 1333-1337.	3.0	17
237	Optimal Configuration and Sizing of Seaport Microgrids including Renewable Energy and Cold Ironingâ€"The Port of Aalborg Case Study. Energies, 2022, 15, 431.	3.1	17
238	Dynamic voltage restore based on switched-capacitor multilevel inverter with ability to compensate for voltage drop, harmonics, and unbalancing simultaneously. Electric Power Systems Research, 2022, 207, 107826.	3.6	17
239	Electric cars, ships, and their charging infrastructure â€“ A comprehensive review. Sustainable Energy Technologies and Assessments, 2022, 52, 102177.	2.7	17
240	Economic power dispatch of distributed generators in a grid-connected microgrid. , 2015, , .		16
241	Optimal adaptive droop control for effective load sharing in AC microgrids. , 2016, , .		16
242	Adaptive overcurrent protection for microgrids in extensive distribution systems. , 2016, , .		16
243	Convergence analysis of distributed control for operation cost minimization of droop controlled DC microgrid based on multiagent. , 2016, , .		16
244	Frequency-division power sharing and hierarchical control design for DC shipboard microgrids with hybrid energy storage systems. , 2017, , .		16
245	A Reduced-Order Enhanced State Observer Control of DC-DC Buck Converter. IEEE Access, 2018, 6, 56184-56191.	4.2	16
246	Microgrids Technologies in Future Seaports. , 2018, , .		16
247	Energy Commitment for a Power System Supplied by Multiple Energy Carriers System using Following Optimization Algorithm. Applied Sciences (Switzerland), 2020, 10, 5862.	2.5	16
248	Inverter Parallelization for an Islanded Microgrid Using the Hopf Oscillator Controller Approach With Self-Synchronization Capabilities. IEEE Transactions on Industrial Electronics, 2021, 68, 10879-10889.	7.9	16
249	Impedance Modeling of Three-Phase Grid-Connected Voltage Source Converters With Frequency-Locked-Loop-Based Synchronization Algorithms. IEEE Transactions on Power Electronics, 2022, 37, 4511-4525.	7.9	16
250	Parallel operation of uninterruptible power supply systems in microgrids. , 2007, , .		15
251	Load shifting control and management of domestic microgeneration systems for improved energy efficiency and comfort. , 2015, , .		15
252	Voltage control of DC islanded microgrids: A decentralized scalable approach. , 2015, , .		15

#	Article	IF	Citations
253	Multi-level energy management and optimal control of a residential DC microgrid. , 2017, , .		15
254	Multiple-Complex Coefficient-Filter-Based PLL for Improving the Performance of Shunt Active Power Filter under Adverse Grid Conditions. , 2018, , .		15
255	A Hybrid Compensator Configuration for VAR Control and Harmonic Suppression in All-Electric Shipboard Power Systems. IEEE Transactions on Power Delivery, 2020, 35, 1379-1389.	4.3	15
256	Space Microgrids: New Concepts on Electric Power Systems for Satellites. IEEE Electrification Magazine, 2020, 8, 8-19.	1.8	15
257	Adaptive Power Management of Hierarchical Controlled Hybrid Shipboard Microgrids. IEEE Access, 2022, 10, 21397-21411.	4.2	15
258	Droop-control-based state-of-charge balancing method for charging and discharging process in autonomous DC microgrids. , 2014, , .		14
259	Fuzzy droop control loops adjustment for stored energy balance in distributed energy storage system. , 2015, , .		14
260	Admittance-type RC-mode droop control to introduce virtual inertia in DC microgrids. , 2017, , .		14
261	Regulatory-framework-embedded energy management system for microgrids: The case study of the Spanish self-consumption scheme. Applied Energy, 2019, 251, 113374.	10.1	14
262	A Review of the Conceptualization and Operational Management of Seaport Microgrids on the Shore and Seaside. Energies, 2021, 14, 7941.	3.1	14
263	Secondary coordinated control of islanded microgrids based on consensus algorithms. , 2014, , .		13
264	Voltage scheduling droop control for State-of-Charge balance of distributed energy storage in DC microgrids. , 2014, , .		13
265	Control and analysis of droop and reverse droop controllers for distributed generations. , 2014, , .		13
266	Advanced smart metering infrastructure for future smart homes. , 2015, , .		13
267	A Robot-Soccer-Coordination Inspired Control Architecture Applied to Islanded Microgrids. IEEE Transactions on Power Electronics, 2017, 32, 2728-2742.	7.9	13
268	A Cascaded H-Bridge With Integrated Boosting Circuit. IEEE Transactions on Power Electronics, 2021, 36, 18-22.	7.9	13
269	Experimental evaluation of voltage unbalance compensation in an islanded microgrid. , 2011, , .		12
270	Coordinated power control strategy based on primary-frequency-signaling for islanded microgrids. , 2013, , .		12

#	Article	IF	Citations
271	Simultaneous stability and sensitivity in model cortical networks is achieved through anti-correlations between the in- and out-degree of connectivity. Frontiers in Computational Neuroscience, 2013, 7, 156.	2.1	12
272	Autonomous active and reactive power distribution strategy in islanded microgrids. , 2014, , .		12
273	Development and integration of a HEMS with an advanced smart metering infrastructure. , 2016, , .		12
274	An open virtual neighbourhood network to connect IoT infrastructures and smart objects â€" Vicinity: IoT enables interoperability as a service. , 2017, , .		12
275	Coupling effect analysis and control for gridâ€connected multiâ€microgrid clusters. IET Power Electronics, 2020, 13, 1059-1070.	2.1	12
276	Improved direct model predictive control for variable magnitude variable frequency wave energy converter connected to constant power load. Journal of Energy Storage, 2021, 43, 103175.	8.1	12
277	How Gibbs Distributions May Naturally Arise fromÂSynaptic Adaptation Mechanisms. AÂModel-BasedÂArgumentation. Journal of Statistical Physics, 2009, 136, 565-602.	1.2	11
278	Modeling and sensitivity analysis of consensus algorithm based distributed hierarchical control for DC microgrids. , 2015, , .		11
279	A generalized discontinuous PWM based neutral point voltage balancing method for three-level NPC voltage source inverter with switching losses reduction. , 2017, , .		11
280	Angle Stability Analysis for Voltage-Controlled Converters. IEEE Transactions on Industrial Electronics, 2017, 64, 6265-6275.	7.9	11
281	General High-Frequency-Link Analysis and Application of Dual Active Bridge Converters. IEEE Transactions on Power Electronics, 2020, 35, 8673-8688.	7.9	11
282	Dynamic Modeling of Multiple Microgrid Clusters Using Regional Demand Response Programs. Energies, 2020, 13, 4050.	3.1	11
283	Energy Management System for an Islanded Renewables-based DC Microgrid. , 2020, , .		11
284	LTP Modeling of Single-Phase $T/4$ Delay-Based PLLs. IEEE Transactions on Industrial Electronics, 2021, 68, 9003-9008.	7.9	11
285	Deep Learning-Based Probabilistic Autoencoder for Residential Energy Disaggregation: An Adversarial Approach. IEEE Transactions on Industrial Informatics, 2022, 18, 8399-8408.	11.3	11
286	Event-triggered distributed voltage regulation by heterogeneous BESS in low-voltage distribution networks. Applied Energy, 2022, 312, 118597.	10.1	11
287	A distributed real-time power management scheme for shipboard zonal multi-microgrid system. Applied Energy, 2022, 317, 119072.	10.1	11
288	An islanding microgrid reactive power sharing scheme enhanced by programmed virtual impedances. , 2012, , .		10

#	Article	IF	Citations
289	Multiagent based distributed control for operation cost minimization of droop controlled AC microgrid using incremental cost consensus. , 2015, , .		10
290	A direct voltage unbalance compensation strategy for islanded microgrids. , 2015, , .		10
291	Hierarchical controlled grid-connected microgrid based on a novel autonomous current sharing controller. , 2015, , .		10
292	Small-signal modeling, analysis and testing of parallel three-phase-inverters with a novel autonomous current sharing controller. , 2015, , .		10
293	Generation-side power scheduling in a grid-connected DC microgrid. , 2015, , .		10
294	Distributed coordination of electric vehicle charging in a community microgrid considering real-time price. , 2016, , .		10
295	Analysis and distributed control of power flow in DC microgrids to improve system efficiency. , 2016, , .		10
296	Modular Online Uninterruptible Power System Plugâ€˜nâ€™Play Control and Stability Analysis. IEEE Transactions on Industrial Electronics, 2016, 63, 3765-3776.	7.9	10
297	An Evaluation Method for Voltage Dips in a Shipboard Microgrid Under Quasi-Balanced and Unbalanced Voltage Conditions. IEEE Transactions on Industrial Electronics, 2019, 66, 7683-7693.	7.9	10
298	Virtual Resistance Tradeoff Design for DCMG Grid-Forming Converters Considering Static- and Large-Signal Dynamic Constraints. IEEE Transactions on Power Electronics, 2021, 36, 5582-5593.	7.9	10
299	Comprehensive power flow modelling of hierarchically controlled AC/DC hybrid islanded microgrids. International Journal of Electrical Power and Energy Systems, 2021, 127, 106629.	5.5	10
300	Smart-Building Applications: Deep Learning-Based, Real-Time Load Monitoring. IEEE Industrial Electronics Magazine, 2021, 15, 4-15.	2.6	10
301	A Frequency Independent Technique to Estimate Harmonics and Interharmonics in Shipboard Microgrids. IEEE Transactions on Smart Grid, 2022, 13, 888-899.	9.0	10
302	LTP Modeling and Stability Assessment of Multiple Second-Order Generalized Integrator-Based Signal Processing/Synchronization Algorithms and Their Close Variants. IEEE Transactions on Power Electronics, 2022, 37, 5062-5077.	7.9	10
303	Secondary control for voltage unbalance compensation in an islanded microgrid. , 2011, , .		9
304	Mitigation of voltage and current harmonics in grid-connected microgrids. , 2012, , .		9
305	Secondary control for compensation of voltage harmonics and unbalance in microgrids. , 2012, , .		9
306	A simple autonomous current-sharing control strategy for fast dynamic response of parallel inverters in islanded microgrids. , 2014, , .		9

#	Article	IF	Citations
307	Power flow analysis for DC voltage droop controlled DC microgrids. , 2014, , .		9
308	Smart metering system for microgrids. , 2015, , .		9
309	Stored energy balance for distributed PV-based active generators in an AC microgrid. , 2015, , .		9
310	Stability analysis for isolated AC microgrids based on PV-active generators. , 2015, , .		9
311	A hybrid algorithm for fault locating in looped microgrids. , 2016, , .		9
312	Elimination of zero sequence circulating current between parallel operating three-level inverters. , 2016, , .		9
313	Voltage unbalance and harmonic compensation in microgrids by cooperation of distributed generators and active power filters. , 2016, , .		9
314	Reduced order generalized integrators with phase compensation for three-phase active power filter. , 2017, , .		9
315	An Effective Solution for Regeneration Protection in Uninterruptible Power Supply. IEEE Transactions on Industry Applications, 2019, 55, 3055-3065.	4.9	9
316	Synchronization and Current Sharing for Nonlinear-oscillator-based Inverters in Islanded Three-phase Microgrid. , 2019, , .		9
317	Coordinated Control of Diesel Generators and Batteries in DC Hybrid Electric Shipboard Power System. Energies, 2021, 14, 6246.	3.1	9
318	DC-Link Voltage Control Aided for the Inertial Support During Severe Faults in Weak Grids. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2021, 9, 7296-7305.	5.4	9
319	Hierarchical control scheme for voltage unbalance compensation in islanded microgrids. , 2011, , .		8
320	Microgrid reactive and harmonic power sharing using enhanced virtual impedance. , 2013, , .		8
321	Distributed low voltage ride-through operation of power converters in grid-connected microgrids under voltage sags. , 2015, , .		8
322	A circulating current suppression method for parallel connected voltage-source-inverters (VSI) with common DC and AC buses. , 2016, , .		8
323	Generation and demand scheduling for a grid-connected hybrid microgrid considering price-based incentives. , 2017, , .		8
324	Enhanced Intelligent Energy Management System for a Renewable Energy-Based AC Microgrid. Energies, 2020, 13, 3268.	3.1	8

#	Article	IF	Citations
325	Stability Enhancement of Inverters in Grid-Connected Microgrids Using FIR Filter. IEEE Journal of Emerging and Selected Topics in Industrial Electronics, 2021, 2, 122-131.	3.9	8
326	Effective Controls of Fixed Capacitor-Thyristor Controlled Reactors for Power Quality Improvement in Shipboard Microgrids. IEEE Transactions on Industry Applications, 2021, 57, 2838-2849.	4.9	8
327	Optimized Control Strategy for Photovoltaic Hydrogen Generation System with Particle Swarm Algorithm. Energies, 2022, 15, 1472.	3.1	8
328	Electric Vehicle Charging Load Allocation at Residential Locations Utilizing the Energy Savings Gained by Optimal Network Reconductoring. Smart Cities, 2022, 5, 177-205.	9.4	8
329	Robust PID-PSS Design for Stability Improvment of Grid-Tied HydroTurbine Generator. , 2021, , .		8
330	Droop control of a multifunctional PV inverter. , 2008, , .		7
331	Selective compensation of voltage harmonics in an islanded microgrid. , 2011, , .		7
332	Frequency stability of hierarchically controlled hybrid photovoltaic-battery-hydropower microgrids. , 2014, , .		7
333	Autonomous control of distributed generation and storage to coordinate P/Q sharing in islanded microgrids - An approach beyond droop control. , 2014, , .		7
334	Design of energy storage control strategy to improve the PV system power quality. , 2016, , .		7
335	Comparison of a synchronous reference frame virtual impedance-based autonomous current sharing control with conventional droop control for parallel-connected inverters. , 2016, , .		7
336	An enhanced hierarchical control strategy for the Internet of Things-based home scale microgrid. , 2017, , .		7
337	Modeling and Controls of Flywheel Energy Storage Systems for Energy Harvesting from Harbor Electrical Cranes. , 2018, , .		7
338	Cyber Physical Energy Systems Modules for Power Sharing Controllers in Inverter Based Microgrids. Inventions, 2018, 3, 66.	2.5	7
339	A Resolution-Enhanced Sliding Matrix Pencil Method for Evaluation of Harmonics Distortion in Shipboard Microgrids. IEEE Transactions on Transportation Electrification, 2020, 6, 1290-1300.	7.8	7
340	Self-directed Energy Management System for an Islanded Cube Satellite Nanogrid. , 2020, , .		7
341	A Cascaded DC-AC-AC Grid-Tied Converter for PV Plants with AC-Link. Electronics (Switzerland), 2021, 10, 409.	3.1	7
342	An Accurate Physical Model for PV Modules With Improved Approximations of Series-Shunt Resistances. IEEE Journal of Photovoltaics, 2021, 11, 699-707.	2.5	7

#	Article	IF	Citations
343	Hierarchical Control of Space Closed Ecosystems: Expanding Microgrid Concepts to Bioastronautics. IEEE Industrial Electronics Magazine, 2021, 15, 16-27.	2.6	7
344	Guest Editorial Editorial Special Issue on Power Electronics for Microgridsâ€"Part I. IEEE Transactions on Power Electronics, 2010, 25, 2885-2888.	7.9	6
345	Tertiary control for optimal unbalance compensation in islanded microgrids. , 2014, , .		6
346	Multiagent-based distributed control for operation cost minimization of droop controlled DC microgrid using incremental cost consensus. , 2015, , .		6
347	Coordinated secondary control for balanced discharge rate of energy storage system in islanded microgrids. , 2015, , .		6
348	Dynamic consensus algorithm based distributed voltage harmonic compensation in islanded microgrids. , 2015, , .		6
349	A simplified control architecture for three-phase inverters in modular UPS application with shunt active power filter embedded. , 2015, , .		6
350	Cooperative frequency control for autonomous AC Microgrids. , 2015, , .		6
351	Hierarchical control for voltage harmonics compensation in multi-area microgrids. , 2015, , .		6
352	Online energy management system for distributed generators in a grid-connected microgrid. , 2015, , .		6
353	Energy management system with equalization algorithm for distributed energy storage systems in PV-active generator based low voltage DC microgrids. , 2015, , .		6
354	An embedded voltage harmonic compensation strategy for current controlled DG interfacing converters. , 2016, , .		6
355	A GPS-based control method for load sharing and power quality improvement in microgrids. , 2016, , .		6
356	Combined solar charging stations and energy storage units allocation for electric vehicles by considering uncertainties. , 2017, , .		6
357	Real-time optimal scheduling for prosumers resilient to regulatory changes. , 2018, , .		6
358	Hybrid Energy Storage Systems for Voltage Stabilization in Shipboard Microgrids. , 2019, , .		6
359	A Deep Learning Method for Short-Term Dynamic Positioning Load Forecasting in Maritime Microgrids. Applied Sciences (Switzerland), 2020, 10, 4889.	2.5	6
360	Detailed Operation Scheduling and Control for Renewable Energy Powered Microgrids. Computer Aided Chemical Engineering, 2011, 29, 1819-1823.	0.5	6

#	Article	IF	Citations
361	A Comparison of Fixed-Parameter Active-Power-Oscillation Damping Solutions for Virtual Synchronous Generators. , 2021, , .		6
362	Control of single-phase islanded PV/battery streetlight cluster based on power-line signaling. , 2013, , .		5
363	Coordinated primary and secondary control with frequency-bus-signaling for distributed generation and storage in islanded microgrids. , 2013, , .		5
364	Cooperative management for a cluster of residential prosumers. , 2016, , .		5
365	Optimal power scheduling for an islanded hybrid microgrid. , 2016, , .		5
366	A secondary-control based fault current limiter for four-wire three phase inverter-interfaced DGs. , 2017, , .		5
367	Adaptive synchronization of grid-connected three-phase inverters by using virtual oscillator control. , 2018, , .		5
368	Bumpless Optimal Control over Multi-Objective Microgrids with Mode-Dependent Controllers. Energies, 2019, 12, 3619.	3.1	5
369	Research on Synchronverter-Based Regenerative Braking Energy Feedback System of Urban Rail Transit. Energies, 2020, 13, 4418.	3.1	5
370	Message Queuing Telemetry Transport Communication Infrastructure for Grid-Connected AC Microgrids Management. Energies, 2021, 14, 5610.	3.1	5
371	In-Loop Filters and Prefilters in Phase-Locked Loop Systems: Equivalent or Different Solutions?. IEEE Industrial Electronics Magazine, 2022, 16, 23-35.	2.6	5
372	A Decentralized Control Scheme for Adaptive Power-Sharing in Ships based Seaport Microgrid. , 2020, , .		5
373	Distributed Event-Triggered Optimal Control Method for Heterogeneous Energy Storage Systems in Smart Grid. IEEE Transactions on Sustainable Energy, 2022, 13, 1944-1956.	8.8	5
374	A novel robust communication algorithm for distributed secondary control of islanded MicroGrids. , 2013, , .		4
375	A single phase seven-level grid-connected inverter based on three reference SPWM strategy. , 2014, , .		4
376	Modeling and control of flexible HEV charging station upgraded with flywheel energy storage. , 2014, , .		4
377	Modular power architectures for microgrid clusters. , 2014, , .		4
378	Energy Management Systems and tertiary regulation in hierarchical control architectures for islanded microgrids. , 2015, , .		4

#	Article	IF	Citations
379	Stability analysis and design of the improved droop controller on a voltage source inverter. , 2015, , .		4
380	Two-level control for fast electrical vehicle charging stations with multi flywheel energy storage system. , 2015, , .		4
381	Maritime DC microgrids - a combination of microgrid technologies and maritime onboard power system for future ships. , 2016, , .		4
382	Containment and consensus-based distributed coordination control for voltage bound and reactive power sharing in AC microgrid. , 2017, , .		4
383	Specialized hierarchical control strategy for DC distribution based shipboard microgrids: A combination of emerging DC shipboard power systems and microgrid technologies. , 2017, , .		4
384	Impact of the voltage dips in shipboard microgrid power systems. , 2017, , .		4
385	A Novel Grid-Connected Harmonic Current Suppression Control for Autonomous Current Sharing Controller-Based AC Microgrids. , 2018, , .		4
386	Power quality assessment in real shipboard microgrid systems under unbalanced and harmonic AC bus voltage. , 2018, , .		4
387	A Novel Compact dq-Reference Frame Model for Inverter-Based Microgrids. Electronics (Switzerland), 2019, 8, 1326.	3.1	4
388	AC Microgrids Protection: A Digital Coordinated Adaptive Scheme. Applied Sciences (Switzerland), 2021, 11, 7066.	2.5	4
389	Scalable architecture of DC microgrid implemented with multiâ€input multiâ€output converter. IET Power Electronics, 2020, 13, 4480-4489.	2.1	4
390	Open-Loop Synchronization Systems for Grid-Tied Power Converters: Literature Overview, Design Considerations, Advantages, and Disadvantages. IEEE Industrial Electronics Magazine, 2022, 16, 14-22.	2.6	4
391	Equalization algorithm for distributed energy storage systems in islanded AC microgrids. , 2015, , .		3
392	Distributed cooperative control of multi flywheel energy storage system for electrical vehicle fast charging stations. , 2015, , .		3
393	Negative sequence droop method based hierarchical control for low voltage ride-through in grid-interactive microgrids. , 2015, , .		3
394	Linear active disturbance rejection control for LCL type grid-connected converter. , 2016, , .		3
395	A modified droop control method for parallel-connected current source inverters. , 2016, , .		3
396	A control architecture to coordinate distributed generators and active power filters coexisting in a microgrid. , 2016, , .		3

#	Article	IF	Citations
397	A power sharing method based on modified droop control for modular UPS. , 2017, , .		3
398	Grid voltage modulated control of grid-connected voltage source inverters under unbalanced grid conditions. , 2017, , .		3
399	A Novel Coordinated Control of Renewable Energy Sources and Energy Storage System in Islanded Microgrid. , 2018, , .		3
400	Battery Energy Storage Systems for Mitigating Fluctuations Caused by Pulse Loads and Propulsion Motors in Shipboard Microgrids. , 2019, , .		3
401	Experiments on a Real-Time Energy Management System for Islanded Prosumer Microgrids. Electronics (Switzerland), 2019, 8, 925.	3.1	3
402	Open IoT Infrastructures for In-Home Energy Management and Control. , 2019, , .		3
403	Stability Improvement of Converter-side Current Controlled Grid-Connected Inverters. , 2019, , .		3
404	VICINITY Platform-based Load Scheduling Method by Considering Smart Parking and Smart Appliance. , 2019, , .		3
405	Harmonics Mitigation in Hybrid AC/DC Shipboard Microgrids Using Fixed Capacitor-Thyristor Controlled Reactors. , 2020, , .		3
406	Stability Enhancement of Grid-Connected Inverters Using Weighted Average Current Control Method. IEEE Journal of Emerging and Selected Topics in Industrial Electronics, 2022, 3, 694-703.	3.9	3
407	Finding optimal assortativity configurations in directed networks. Journal of Complex Networks, 2021, 8, .	1.8	3
408	An Integrated Synchronization and Control Strategy for Parallel-Operated Inverters Based on Vâ€“I Droop Characteristics. IEEE Transactions on Power Electronics, 2022, 37, 5373-5384.	7.9	3
409	A novel modulation for Adaptive Control Issue-Based Optimization Techniques: Balloon Effect. , 2021, , .		3
410	Stability constrained efficiency optimization for droop controlled DC-DC conversion system. , 2013, , .		2
411	Secondary voltage unbalance compensation for three-phase four-wire islanded microgrids. , 2014, , .		2
412	Control of single-phase islanded PV/battery minigrids based on power-line signaling. , 2014, , .		2
413	A robust and fast generic voltage sag detection technique. , 2015, , .		2
414	Reactive power support of electrical vehicle charging station upgraded with flywheel energy storage system. , 2015, , .		2

#	Article	IF	Citations
415	Control design of VSIs to enhance transient performance in microgrids. , 2016, , .		2
416	Four-quadrant bidirectional operation of charging station upgraded with flywheel energy storage system. , 2016, , .		2
417	Enhanced fractional-order repetitive control for three-phase active power filter. , 2017, , .		2
418	Discharge rate balancing control strategy based on dynamic consensus algorithm for energy storage units in AC microgrids. , 2017, , .		2
419	Optimization scheduling in intelligent Energy Management System for the DC residential distribution system. , 2017, , .		2
420	A novel harmonic current sharing control strategy for parallel-connected inverters. , 2017, , .		2
421	Modeling and Tuning of Adaptive Complex Current Controller for Three-Phase Grid-Interfaced Power Converters. , 2019, , .		2
422	Stability Analysis Considering Dual Physical Constraints of Parallel-connected Virtual Synchronous Generators forming Microgrids. , 2019, , .		2
423	A Dual-input Multi-label Classification Approach for Non-Intrusive Load Monitoring via Deep Learning. , 2020, , .		2
424	High-Frequency Modeling and Filter Design for PWM Drives with Long Cables. Energies, 2021, 14, 1155.	3.1	2
425	Design of Cost-Effective Compensators to Enhance Voltage Stability and Harmonics Contamination of High-Power More Electric Marine Vessels. IEEE Transactions on Industry Applications, 2021, 57, 4130-4142.	4.9	2
426	LoRa Enabled Smart Inverters for Microgrid Scenarios with Widespread Elements. Electronics (Switzerland), 2021, 10, 2680.	3.1	2
427	Modified Virtual Inertia Mechanism Based ESS for A real Multi-Source Power System Application: the Egyptian Grid. , 2021, , .		2
428	Power quality assessment using signal periodicity independent algorithms â€“ A shipboard microgrid case study. Applied Energy, 2022, 307, 118151.	10.1	2
429	An IoT Platform-based Multi-objective Energy Management System for Residential Microgrids. , 2020, , .		2
430	Energy Optimization of Air Handling Units Using Constrained Predictive Controllers Based on Dynamic Neural Networks. IEEE Access, 2022, 10, 56578-56590.	4.2	2
431	Ride-through improvement of wind-turbines via feedback linearization. , 2008, , .		1
432	Hierarchical control of power plants with microgrid operation. , 2010, , .		1

#	Article	IF	Citations
433	Uninterruptible Power Supplies. The Electrical Engineering Handbook, 2011, , 1-22.	0.2	1
434	Supervisory Control for Real Time Reactive Power Flow Optimization in Islanded Microgrids. Computer Aided Chemical Engineering, 2013, , 325-330.	0.5	1
435	Agent-based distributed unbalance compensation for optimal power quality in islanded microgrids. , 2014, , .		1
436	High-performance control of paralleled three-phase inverters for residential microgrid architectures based on online uninterruptable power systems. , 2015, , .		1
437	Distributed bus signaling control for a DC charging station with multi paralleled flywheel energy storage system. , 2015, , .		1
438	Modular Plug'n'Play control architectures for three-phase inverters in UPS applications. , 2015, , .		1
439	Active power regulation based on droop for AC microgrid. , 2015, , .		1
440	Virtual admittance loop for voltage harmonic compensation in microgrids. , 2015, , .		1
441	Coupling/tradeoff analysis and novel containment control for reactive power, output voltage in islanded Micro-Grid. , 2016, , .		1
442	A dynamic consensus algorithm based low-voltage ride-through operation of power converters in grid-interactive microgrids. , 2016, , .		1
443	Control architecture for paralleled current-source-inverter (CSI) based uninterruptible power systems (UPS). , 2016, , .		1
444	Tertiary control of voltage unbalance compensation for optimal power quality in islanded microgrids. , 2016, , .		1
445	Method for load sharing and power management in a hybrid PV/battery source islanded microgrid. , 2016, , .		1
446	The influence of internal current loop on transient response performance of I-V droop controlled paralleled DC-DC converters. , 2017, , .		1
447	Thermal Impact Analysis of Circulating Current in High Power Modular Online Uninterruptible Power Supplies Application. Energies, 2017, 10, 50.	3.1	1
448	Design and Implementation of a Dual-Input Single-Output Photovoltaic Converter. Energies, 2020, 13, 3679.	3.1	1
449	Generalization Capacity Analysis of Non- Intrusive Load Monitoring using Deep Learning. , 2020, , .		1
450	Droop K-Sharing Function for Energy Management of DC Microgrids. IEEE Journal of Emerging and Selected Topics in Industrial Electronics, 2021, 2, 257-266.	3.9	1

#	Article	IF	Citations
451	An Overview of Grid-Forming Control for Wind Turbine Converters. , 2021, , .		1
452	Hierarchically controlled ecological life support systems. Computers and Chemical Engineering, 2022, 157, 107625.	3.8	1
453	Stability Boundary Analysis of Islanded Droop-Based Microgrids Using an Autonomous Shooting Method. Energies, 2022, 15, 2120.	3.1	1
454	State of Charge Balance of Distributed Batteries in DC Shipboard Microgrids. , 2021, , .		1
455	Provision of flexible load control by multi-flywheel-energy-storage system in electrical vehicle charging stations. , 2015, , .		0
456	Thermal impact analysis of circulating current in high power modular online uninterruptible power supplies application. , 2015, , .		0
457	Dynamic consensus algorithm based distributed unbalance compensation in islanded microgrids. , 2015, , .		0
458	A root-locus design methodology derived from the impedance stability criterion and its application for LCL grid-connected converters. , 2016, , .		0
459	Modular energy management system applicable to residential microgrids. , 2016, , .		0
460	A multi-objective demand side management considering ENS cost in smart grids. , 2017, , .		0
461	Impedance stability assessment of active damping strategies for LCL grid-connected converters. , 2017, , .		0
462	Stability and Resonance Analysis of AC Power Electronics-Based Systems. , 2018, , .		0
463	An Approach for the Emulation of DC Grid Admittances: Implementation on a Buck Converter. , 2018, , .		0
464	Enhanced Power Management System for Droop Control in a Grid Connected DC Microgrid. , 2019, , .		0
465	Guest Editorial Special Section on Energy Internet. IEEE Transactions on Industrial Informatics, 2019, 15, 1753-1755.	11.3	0
466	Harmonics Rejection Capability Enhancement of Passive Power Filters for All-Electric-Shipboard Micro-Grids. , 2020, , .		0
467	A Review of Grid Code Requirements for the Integration of Renewable Energy Sources in Ethiopia. Energies, 2022, 15, 5197.	3.1	0