Milan Prodanovic

List of Publications by Year
in descending order

85 papers	5,731 citations	331670 21 h-index	265206 42 g-index
85 all docs	85 docs citations	85 times ranked	4256 citing authors

#	Article	IF	Citations
1	Modeling, Analysis and Testing of Autonomous Operation of an Inverter-Based Microgrid. IEEE Transactions on Power Electronics, 2007, 22, 613-625.	7.9	2,337
2	Energy Management in Autonomous Microgrid Using Stability-Constrained Droop Control of Inverters. IEEE Transactions on Power Electronics, 2008, 23, 2346-2352.	7.9	679
3	Dynamic Stability of a Microgrid With an Active Load. IEEE Transactions on Power Electronics, 2013, 28, 5107-5119.	7.9	399
4	Control and filter design of three-phase inverters for high power quality grid connection. IEEE Transactions on Power Electronics, 2003, 18, 373-380.	7.9	352
5	Control of inverter-based micro-grids. Electric Power Systems Research, 2007, 77, 1204-1213.	3.6	282
6	High-Quality Power Generation Through Distributed Control of a Power Park Microgrid. IEEE Transactions on Industrial Electronics, 2006, 53, 1471-1482.	7.9	261
7	An optimal day-ahead load scheduling approach based on the flexibility of aggregate demands. Applied Energy, 2017, 198, 1-11.	10.1	96
8	Harmonic and reactive power compensation as ancillary services in inverter-based distributed generation. IET Generation, Transmission and Distribution, 2007, 1, 432.	2.5	95
9	Real-Time Power-Hardware-in-the-Loop Implementation of Variable-Speed Wind Turbines. IEEE Transactions on Industrial Electronics, 2017, 64, 1893-1904.	7.9	82
10	A Closed-Loop State Estimation Tool for MV Network Monitoring and Operation. IEEE Transactions on Smart Grid, 2015, 6, 2116-2125.	9.0	65
11	State Forecasting and Operational Planning for Distribution Network Energy Management Systems. IEEE Transactions on Smart Grid, 2016, 7, 1002-1011.	9.0	65
12	State Estimation Techniques for Electric Power Distribution Systems. , 2014, , .		61
13	A survey of reliability assessment techniques for modern distribution networks. Renewable and Sustainable Energy Reviews, 2018, 91, 344-357.	16.4	55
14	Residential Demand Management Using Individualized Demand Aware Price Policies. IEEE Transactions on Smart Grid, 2017, 8, 1284-1294.	9.0	52
15	Virtual Impedance Design Considerations for Virtual Synchronous Machines in Weak Grids. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2020, 8, 1477-1489.	5.4	52
16	Power-hardware-in-the-loop test beds: evaluation tools for grid integration of distributed energy resources. IEEE Industry Applications Magazine, 2016, 22, 18-26.	0.4	51
17	Design and Analysis of Virtual Synchronous Machines in Inductive and Resistive Weak Grids. IEEE Transactions on Energy Conversion, 2019, 34, 1818-1828.	5.2	46
18	Advanced building energy management based on a two-stage receding horizon optimization. Applied Energy, 2015, 160, 194-205.	10.1	35

#	Article	IF	Citations
19	Short-Term Load Forecasting at the local level using smart meter data. , 2015, , .		33
20	Energy Management System with Stability Constraints for Stand-alone Autonomous Microgrid. , 2007, , .		28
21	Application-oriented modelling of domestic energy demand. International Journal of Electrical Power and Energy Systems, 2014, 61, 656-664.	5.5	27
22	Harmonic Virtual Impedance Design for Parallel-Connected Grid-Tied Synchronverters. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2019, 7, 493-503.	5.4	27
23	Residential Energy Load Profile Generation Using a Probabilistic Approach. , 2012, , .		26
24	Modelling of concentrating solar power plant for power system reliability studies. IET Renewable Power Generation, 2015, 9, 120-130.	3.1	25
25	Estimation and Analysis of Building Energy Demand and Supply Costs. Energy Procedia, 2015, 83, 216-225.	1.8	24
26	Demand-aware price policy synthesis and verification services for Smart Grids. , 2014, , .		22
27	Full-State Feedback Control of Back-to-Back Converters Based on Differential and Common Power Concepts. IEEE Transactions on Industrial Electronics, 2019, 66, 9045-9055.	7.9	22
28	Analysis of Net Zero-energy Building in Spain. Integration of PV, Solar Domestic Hot Water and Air-conditioning Systems. Energy Procedia, 2014, 48, 828-836.	1.8	21
29	A rapid prototyping environment for DC and AC microgrids: Smart energy integration Lab (SEIL). , 2017, , .		19
30	A Power-HIL microgrid testbed: Smart energy integration lab (SEIL). , 2014, , .		18
31	Analysis of Dynamic Properties of VSCs Connected to Weak Grids Including the Effects of Dead Time and Time Delays. IEEE Transactions on Sustainable Energy, 2019, 10, 1066-1075.	8.8	18
32	Analytical methodology for reliability assessment of distribution networks with energy storage in islanded and emergency-tie restoration modes. International Journal of Electrical Power and Energy Systems, 2019, 107, 735-744.	5.5	18
33	Two-stage Optimization for Building Energy Management. Energy Procedia, 2014, 62, 346-354.	1.8	17
34	A unified control of back-to-back converter. , 2016, , .		17
35	Multivector Model Predictive Power Control for Grid Connected Converters in Renewable Power Plants. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2022, 10, 1466-1478.	5.4	16
36	Multiâ€nodal shortâ€term energy forecasting using smart meter data. IET Generation, Transmission and Distribution, 2018, 12, 2988-2994.	2.5	14

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37	User Flexibility Aware Price Policy Synthesis for Smart Grids. , 2015, , .		13
38	Event-triggered topology identification for state estimation in active distribution networks. , 2016, , .		13
39	Parallel Statistical Model Checking for Safety Verification in Smart Grids. , 2018, , .		13
40	Coupling of AC Grids via VSC-HVDC Interconnections for Oscillation Damping Based on Differential and Common Power Control. IEEE Transactions on Power Electronics, 2020, 35, 6548-6558.	7.9	13
41	Model Predictive Control for PMSG-Based Wind Turbines With Overmodulation and Adjustable Dynamic Response Time. IEEE Transactions on Industrial Electronics, 2022, 69, 1573-1585.	7.9	13
42	Distributed voltage control in AuRA-NMS. , 2010, , .		12
43	Analytical method to assess the impact of distributed generation and energy storage on reliability of supply. CIRED - Open Access Proceedings Journal, 2017, 2017, 2092-2096.	0.1	12
44	Detailed discrete-time implementation of a battery-supported synchronverter for weak grids. , 2017, , .		11
45	Virtual Synchronous Machine Control of VSC HVDC for Power System Oscillation Damping. , 2018, , .		11
46	Contribution of active management technologies to the reliability of power distribution networks. Applied Energy, 2020, 267, 114919.	10.1	11
47	Stability analysis for weak grids with power electronics interfaces. , 2016, , .		10
48	Harmonic virtual impedance design for a synchronverter-based battery interface converter. , 2017, , .		10
49	Reliability Assessment of Distribution Networks with Optimal Coordination of Distributed Generation, Energy Storage and Demand Management. Energies, 2019, 12, 3202.	3.1	10
50	Influence of the Phase-Locked Loop on the Design of Microgrids Formed by Diesel Generators and Grid-Forming Converters. IEEE Transactions on Power Electronics, 2022, 37, 5122-5137.	7.9	10
51	Parallel currentâ€controlled synchronverters for voltage and frequency regulation in weak grids. Journal of Engineering, 2019, 2019, 3516-3520.	1.1	9
52	A Glimpse of SmartHG Project Test-bed and Communication Infrastructure. , 2015, , .		8
53	Case based reasoning for distributed voltage control. , 2009, , .		7
54	Incorporating spatial correlation into stochastic generation of solar radiation data. Solar Energy, 2015, 115, 74-84.	6.1	6

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55	Emulation of Complex Grid Scenarios by using Power Hardware In the Loop (PHIL) Techniques. , 2021, , .		6
56	Proactive control for energy systems in Smart Buildings. , 2011, , .		5
57	A demand based approach to optimisation of energy supply mix for smart buildings. , 2012, , .		5
58	Indirect coordination of electricity demand for balancing wind power. IET Renewable Power Generation, 2014, 8, 858-866.	3.1	5
59	Finite-Gain Repetitive Controller for Harmonic Sharing Improvement in a VSM Microgrid. IEEE Transactions on Smart Grid, 2019, 10, 6898-6911.	9.0	5
60	A Two-Layer Near-Optimal Strategy for Substation Constraint Management via Home Batteries. IEEE Transactions on Industrial Electronics, 2022, 69, 8566-8578.	7.9	5
61	Bifurcation Analysis of Active Electrical Distribution Networks Considering Load Tap Changers and Power Converter Capacity Limits. IEEE Transactions on Power Electronics, 2022, 37, 7230-7246.	7.9	5
62	PV system model reduction for reliability assessment studies. , 2013, , .		4
63	A comparison of MV Distribution System State Estimation methods using field data. , 2015, , .		4
64	Estimation and sensitivity analysis of building energy demand. Proceedings of the Institution of Civil Engineers: Engineering Sustainability, 2017, 170, 81-92.	0.7	4
65	Influence of PLL Parameters on Small-Signal Stability of Microgrids with Synchronous Generators. , 2020, , .		4
66	Virtual Admittance Control for Providing Voltage Support using Converter Interfaced Generation. , 2021, , .		4
67	Profitability assessment for self-sufficiency improvement in grid-connected non-residential buildings with on-site PV installations. , 2013, , .		3
68	A laboratory environment for real-time testing of energy management scenarios: Smart Energy Integration Lab (SEIL). , 2014, , .		2
69	Real-time power-hardware-in-the-loop discrete modeling of PMSM wind turbines. , 2014, , .		2
70	Stability analysis for weak meshed networks with power electronics-based distributed generation. , 2017, , .		2
71	Finite-gain-current repetitive controller for synchronverters with harmonic-sharing capabilities. , 2018, , .		2
72	Virtual Friction Control for Power System Oscillation Damping with VSC-HVDC Links. , 2019, , .		2

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73	Two-Stage Optimization for Building Energy Management. Smart Innovation, Systems and Technologies, 2017, , 225-243.	0.6	2
74	Virtual Friction for Oscillation Damping and Inertia Sharing from Multi-Terminal VSC-HVDC Grids. , 2020, , .		2
75	Bifurcation Analysis of Converter-Dominated Electrical Distribution Systems. , 2020, , .		2
76	An integrated approach to optimization of energy supply mix in smart buildings. , 2011, , .		1
77	An alternative approach for market integration distributed energy resources. , 2013, , .		1
78	LTCL-Filter Active-Damping Design Considerations for Low-Switching-Frequency Grid-Tied VSCs. , 2018, , .		1
79	Design and Analysis of a Current-Controlled Virtual Synchronous Machine for Weak Grids. , 2019, , .		1
80	Modelling Power-Frequency Interactions between Voltage Source Converters with PLLs and Power Networks with Reduced Inertia. , 2021, , .		1
81	Converter-Based Solution for Cancellation of Subsynchronous Oscillations in Local Power Grids. , 2021, , .		1
82	Stability analysis and hierarchical control of DC power networks. , 2021, , 215-244.		1
83	Phase-Matched Frequency Adaptive Repetitive Controller for a Grid-Supporting STATCOM. , 2018, , .		0
84	Small-Signal Modelling and Control Design of VSCs in Multi-Terminal Railway Applications. , 2018, , .		0
85	A Comparison of The Renewable Distributed Generation Models used in Reliability Assessment. , 2018, , .		0