Ujjwol Tamrakar

List of Publications by Year
in descending order

38 papers	1,372 citations	1162367 8 h-index	1473754 9 g-index
38 all docs	38 docs citations	38 times ranked	1236 citing authors

#	Article	IF	Citations
1	Optimization-Based Fast-Frequency Estimation and Control of Low-Inertia Microgrids. IEEE Transactions on Energy Conversion, 2021, 36, 1459-1468.	3.7	18
2	Real-Time Estimation of Microgrid Inertia and Damping Constant. IEEE Access, 2021, 9, 114523-114534.	2.6	13
3	Modeling Inverters with Grid Support Functions for Power System Dynamics Studies. , 2021, , .		4
4	Evaluation of Probing Signals for Implementing Moving Horizon Inertia Estimation in Microgrids. , 2021, , .		6
5	Convolutional Neural Network-based Inertia Estimation using Local Frequency Measurements. , 2021, , .		7
6	Model Predictive Integrated Voltage and Frequency Support in Microgrids. , 2021, , .		2
7	Optimization-Based Estimation of Microgrid Equivalent Parameters for Voltage and Frequency Dynamics. , 2021, , .		2
8	Overvoltage Prevention and Curtailment Reduction Using Adaptive Droop-Based Supplementary Control in Smart Inverters. Applied Sciences (Switzerland), 2021, 11, 7900.	1.3	2
9	Model Predictive Dispatch of Energy Storage for Voltage Regulation in Active Distribution Systems. , 2021, , .		0
10	Computationally Efficient Partitioned Modeling of Inverter Dynamics with Grid Support Functions. , 2021, , .		1
11	A Model Predictive Approach for Voltage Support in Microgrids using Energy Storage Systems. , 2021, , .		1
12	Optimization-Based Fast-Frequency Estimation and Control of Low-Inertia Microgrids. , 2021, , .		0
13	Microgrid Stability Definitions, Analysis, and Examples. IEEE Transactions on Power Systems, 2020, 35, 13-29.	4.6	422
14	Inertia Estimation in Power Systems using Energy Storage and System Identification Techniques. , 2020, , .		3
15	Data-Driven Power Electronic Converter Modeling for Low Inertia Power System Dynamic Studies. , 2020, , .		9
16	Linear Quadratic Regulator Controller to Improve Transient Frequency Stability Through Virtual Inertia. , 2020, , .		4
17	Modeling Hydro Power System Frequency Dynamics for Virtual Inertia Emulation. , 2019, , .		1
18	Model Predictive Frequency Control of Low Inertia Microgrids. , 2019, , .		22

#	Article	IF	Citations
19	Review of Challenges and Research Opportunities for Voltage Control in Smart Grids. IEEE Transactions on Power Systems, 2019, 34, 2790-2801.	4.6	270
20	Virtual Inertia Emulation using Commercial Off-The-Shelf Inverters. , 2018, , .		2
21	Efficiency and Reliability Analyses of AC and 380 V DC Distribution in Data Centers. IEEE Access, 2018, 6, 63305-63315.	2.6	42
22	Frequency Response in Grids with High Penetration of Renewable Energy Sources. , 2018, , .		12
23	Impact of Battery Operating Conditions on Remote Microgrid's Energy Management System. , 2018, , .		0
24	Comparative Analysis of Current Control Techniques to Support Virtual Inertia Applications. Applied Sciences (Switzerland), 2018, 8, 2695.	1.3	19
25	Real-time Operation of a Data Center as Virtual Power Plant Considering Battery Lifetime. , 2018, , .		4
26	Experimental verification of virtual inertia in diesel generator based microgrids. , 2017, , .		6
27	Online learning control for harmonics reduction based on current controlled voltage source power inverters. IEEE/CAA Journal of Automatica Sinica, 2017, 4, 447-457.	8.5	15
28	SEPIC converter with wide bandgap semiconductor for PV battery charger. , 2017, , .		4
29	A steady-state equivalent model of solid state transformers for voltage regulation studies. , 2017, , .		2
30	Adaptive droop-based active power curtailment method for overvoltage prevention in low voltage distribution network. , 2017, , .		4
31	Design of online supplementary adaptive dynamic programming for current control in power electronic systems. , 2017, , .		0
32	Virtual Inertia: Current Trends and Future Directions. Applied Sciences (Switzerland), 2017, 7, 654.	1.3	410
33	Parallel operation of virtual synchronous machines with frequency droop control. , 2017, , .		0
34	Reduction of energy consumption of virtual synchronous machine using supplementary adaptive dynamic programming. , 2016, , .		12
35	Current control techniques for applications in virtual synchronous machines. , 2016, , .		4
36	Modeling of photobioreactors for remote microgrids. , 2016, , .		1

#	Article	IF	Citations
37	Efficiency analysis of AC coupled and DC coupled microgrids considering load profile variations. , 2016, , .		9
38	Improving transient stability of photovoltaic-hydro microgrids using virtual synchronous machines. , 2015, , .		39