Thongchart Kerdphol

List of Publications by Year
in descending order

47 papers	1,504 citations	566801 15 h-index	500791 28 g-index
51 all docs	51 docs citations	51 times ranked	1155 citing authors

#	Article	IF	Citations
1	Optimization of a battery energy storage system using particle swarm optimization for stand-alone microgrids. International Journal of Electrical Power and Energy Systems, 2016, 81, 32-39.	3.3	190
2	Robust Virtual Inertia Control of an Islanded Microgrid Considering High Penetration of Renewable Energy. IEEE Access, 2018, 6, 625-636.	2.6	176
3	Enhanced Virtual Inertia Control Based on Derivative Technique to Emulate Simultaneous Inertia and Damping Properties for Microgrid Frequency Regulation. IEEE Access, 2019, 7, 14422-14433.	2.6	144
4	Self-Adaptive Virtual Inertia Control-Based Fuzzy Logic to Improve Frequency Stability of Microgrid With High Renewable Penetration. IEEE Access, 2019, 7, 76071-76083.	2.6	139
5	Virtual Inertia Control Application to Enhance Frequency Stability of Interconnected Power Systems with High Renewable Energy Penetration. Energies, 2018, 11, 981.	1.6	123
6	Robust Virtual Inertia Control of a Low Inertia Microgrid Considering Frequency Measurement Effects. IEEE Access, 2019, 7, 57550-57560.	2.6	119
7	Virtual Inertia Control-Based Model Predictive Control for Microgrid Frequency Stabilization Considering High Renewable Energy Integration. Sustainability, 2017, 9, 773.	1.6	110
8	Optimum battery energy storage system using PSO considering dynamic demand response for microgrids. International Journal of Electrical Power and Energy Systems, 2016, 83, 58-66.	3.3	108
9	Applying Virtual Inertia Control Topology to SMES System for Frequency Stability Improvement of Low-Inertia Microgrids Driven by High Renewables. Energies, 2019, 12, 3902.	1.6	44
10	Battery energy storage system size optimization in microgrid using particle swarm optimization. , 2014, , .		43
11	Optimization of virtual inertia considering system frequency protection scheme. Electric Power Systems Research, 2019, 170, 294-302.	2.1	43
12	Tustin's technique based digital decentralized load frequency control in a realistic multi power system considering wind farms and communications delays. Ain Shams Engineering Journal, 2019, 10, 327-341.	3.5	30
13	Virtual Inertia Synthesis and Control. Power Systems, 2021, , .	0.3	30
14	Fuzzy Logic Control of a Battery Energy Storage System for Stability Improvement in an Islanded Microgrid. Sustainability, 2018, 10, 1645.	1.6	18
15	RBF neural network-based online intelligent management of a battery energy storage system for stand-alone microgrids. Energy, Sustainability and Society, 2016, 6, .	1.7	16
16	Application of PMUs to monitor large-scale PV penetration infeed on frequency of 60Â Hz Japan power system: A case study from Kyushu Island. Electric Power Systems Research, 2020, 185, 106393.	2.1	16
17	Frequency Stability Assessment of Multiple Virtual Synchronous Generators for Interconnected Power System. IEEE Transactions on Industry Applications, 2022, 58, 91-101.	3.3	15
18	Smallâ€signal analysis of multiple virtual synchronous machines to enhance frequency stability of gridâ€connected high renewables. IET Generation, Transmission and Distribution, 2021, 15, 1273-1289.	1.4	14

#	Article	IF	Citations
19	Optimal Battery Energy Storage Size Using Particle Swarm Optimization for Microgrid System. International Review of Electrical Engineering, 2015, 10, 277.	0.1	12
20	Extended Virtual Inertia Control Design for Power System Frequency Regulation. , 2019, , .		11
21	ANN based optimized battery energy storage system size and loss analysis for distributed energy storage location in PV-microgrid. , 2015, , .		10
22	Inertia Estimation of the 60 Hz Japanese Power System From Synchrophasor Measurements. IEEE Transactions on Power Systems, 2023, 38, 753-766.	4.6	9
23	A Study on the Placement of Virtual Synchronous Generator in a Two-Area System. , 2018, , .		8
24	Active Power Allocation of Virtual Synchronous Generator Using Particle Swarm Optimization Approach. Energy and Power Engineering, 2017, 09, 414-424.	0.5	8
25	Determining Inertia of 60 Hz Japan Power System using PMUs from Power Loss Event. , 2021, , .		7
26	A Novel Design of Decentralized LFC to Enhance Frequency Stability of Egypt Power System Including Wind Farms. International Journal on Energy Conversion, 2018, 6, 17.	0.5	7
27	Different optimization schemes for community based energy storage systems. , 2015, , .		6
28	Demonstration of Virtual Inertia Emulation Using Energy Storage Systems to Support Community-Based High Renewable Energy Penetration. , 2018, , .		6
29	Power System Stabilizer Tuning to Enhance Kalimantan Selatan - Tengah and Kalimantan Timur System Interconnection Stability Using Particle Swarm Optimization. , 2018, , .		6
30	An Overview of Virtual Inertia and Its Control. Power Systems, 2021, , 1-11.	0.3	5
31	Comparative Study of Sugeno and Mamdani Fuzzy Inference Systems for Virtual Inertia Emulation. , 2021, , .		5
32	Optimization of Reactive Compensation in Distribution Networks Based on Moth Swarm Intelligence for Multi-Load Levels. International Review of Electrical Engineering, 2017, 12, 342.	0.1	5
33	Inertia Assessment From Transient Measurements: Recent Perspective From Japanese WAMS. IEEE Access, 2022, 10, 66332-66344.	2.6	5
34	Intelligent Determination of a Battery Energy Storage System Size and Location Based on RBF Neural Networks for Microgrids. International Review of Electrical Engineering, 2016, 11, 78.	0.1	3
35	Robust control of combined optimized resistive FCL and ECS for power system transient stability improvement. , 2014, , .		2
36	Frequency Stability Assessment on Virtual Inertia Control Strategy in Connected and Islanded Multi-Area Power Systems. , 2020, , .		2

#	Article	IF	Citations
37	Active Power Allocation of Virtual Synchronous Generator Considering Multiple Operating Scenarios. , 2018, , .		1
38	Robust Interline Power Flow Controller Design for Damping of Low Frequency Oscillations in Power Systems with Wind Power Sources. , 2013, , .		1
39	Synthesis of Robust Virtual Inertia Control. Power Systems, 2021, , 203-226.	0.3	1
40	Wavelet-demodulation-method based out of step detection and damping estimation in Japan campus warns. , 2014, , .		0
41	Construction of PV simulator by using geographic information system and digital surface model. , 2015, , .		0
42	Technical Challenges and Further Research in Virtual Inertia Control. Power Systems, 2021, , 249-256.	0.3	0
43	Fundamental Concepts of Inertia Power Compensation and Frequency Control. Power Systems, 2021, , 13-59.	0.3	0
44	Multiple-Virtual Inertia Synthesis for Interconnected Systems. Power Systems, 2021, , 91-110.	0.3	0
45	Model Predictive Control for Virtual Inertia Synthesis. Power Systems, 2021, , 141-166.	0.3	0
46	Fuzzy Logic Control for Virtual Inertia Synthesis. Power Systems, 2021, , 167-201.	0.3	0
47	Monitoring Large-Scale PV Generation Infeed on Grid Frequency using Synchrophasor Measurement: Recent Perspective from Kyushu Island. , 2020, , .		0