A P Sakis Meliopoulos

List of Publications by Year
in descending order

73	1,435	687363 13	580821 25
papers	citations	h-index	g-index

74	74	74	1052
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Power System Dynamic State Estimation: Motivations, Definitions, Methodologies, and Future Work. IEEE Transactions on Power Systems, 2019, 34, 3188-3198.	6.5	417
2	Roles of Dynamic State Estimation in Power System Modeling, Monitoring and Operation. IEEE Transactions on Power Systems, 2021, 36, 2462-2472.	6.5	104
3	Dynamic State Estimation-Based Protection: Status and Promise. IEEE Transactions on Power Delivery, 2017, 32, 320-330.	4.3	93
4	Advanced Distribution Management System. IEEE Transactions on Smart Grid, 2013, 4, 2109-2117.	9.0	85
5	Dynamic State Estimation for Power System Control and Protection. IEEE Transactions on Power Systems, 2021, 36, 5909-5921.	6.5	66
6	Effective Real-Time Operation and Protection Scheme of Microgrids Using Distributed Dynamic State Estimation. IEEE Transactions on Power Delivery, 2017, 32, 504-514.	4.3	62
7	Dynamic State Estimation Based Protection on Series Compensated Transmission Lines. IEEE Transactions on Power Delivery, 2017, 32, 2199-2209.	4.3	62
8	Effects of Protection System Hidden Failures on Bulk Power System Reliability. , 2006, , .		34
9	The supercalibrator — A fully distributed state estimator. , 2010, , .		34
10	Resilient Protection System Through Centralized Substation Protection. IEEE Transactions on Power Delivery, 2018, 33, 1418-1427.	4.3	32
11	Backup Protection of Multi-Terminal HVDC Grids Based on Quickest Change Detection. IEEE Transactions on Power Delivery, 2019, 34, 177-187.	4.3	30
12	Smart House Management and Control Without Customer Inconvenience. IEEE Transactions on Smart Grid, 2018, 9, 2553-2562.	9.0	27
13	Aggregate modeling of distribution systems for multi-period OPF. , 2016, , .		25
14	Reducing the Fault-Transient Magnitudes in Multiterminal HVdc Grids by Sequential Tripping of Hybrid Circuit Breaker Modules. IEEE Transactions on Industrial Electronics, 2019, 66, 7290-7299.	7.9	24
15	Setting-Less Nonunit Protection Method for DC Line Faults in VSC-MTdc Systems. IEEE Transactions on Industrial Electronics, 2022, 69, 495-505.	7.9	19
16	Dynamic state estimation-based protection of power transformers. , 2015, , .		17
17	Power system harmonic analysis under geomagnetic disturbances. , 2018, , .		16
18	Quadratized model of nonlinear saturable-core inductor for time-domain simulation. , 2009, , .		15

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19	CHARACTERIZATION OF STATE ESTIMATION BIASES. Probability in the Engineering and Informational Sciences, 2006, 20, 157-174.	0.8	13
20	On Three-Phase State Estimation in the Presence of GPS-Synchronized Phasor Measurements. , 2007, , .		13
21	Command authentication via faster than real time simulation. , 2016, , .		12
22	Smart Grid Infrastructure for Distribution Systems and Applications. , 2011, , .		11
23	Safety Assessment of AC Grounding Systems Based on Voltage-Dependent Body Resistance. IEEE Transactions on Industry Applications, 2015, 51, 5204-5211.	4.9	11
24	Data Attack Detection and Command Authentication via Cyber-Physical Comodeling. IEEE Design and Test, 2017, 34, 34-43.	1.2	11
25	Protection and fault locating method of series compensated lines by wavelet based energy traveling wave. , 2017, , .		11
26	Operational flexibility enhancement in power systems with high penetration of wind power using compressed air energy storage. , 2015, , .		10
27	Failure Probability Methodology for Overdutied Circuit Breakers. , 2006, , .		9
28	Dynamic State Estimation based protection of microgrid circuits. , 2015, , .		9
29	Quadratized Three-Phase Induction Motor Model for Steady-State and Dynamic Analysis. , 2006, , .		8
30	Distributed Quasi-Dynamic State Estimation Incorporating Distributed Energy Resources. , 2018, , .		8
31	Dynamic State Estimation-Based Protection of Distribution Systems with High Penetration of DERs. , 2020, , .		8
32	Reliability implications of increased fault currents and breaker failures. , 2007, , .		7
33	Energy Storage Sizing and Probabilistic Reliability Assessment for Power Systems Based on Composite Demand. IEEE Transactions on Power Systems, 2022, 37, 106-117.	6.5	7
34	A bulk power system reliability assessment methodology. European Transactions on Electrical Power, 2007, 17, 413-425.	1.0	6
35	Distributed dynamic state estimation: Fundamental building block for the smart grid. , 2015, , .		6
36	Capacitor bank protection via constraint WLS dynamic state estimation method (CWLS-DSE). , 2016, , .		6

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37	Margin-Based Framework for Online Contingency Selection in Unbalanced Networks. IEEE Transactions on Power Systems, 2017, 32, 30-38.	6.5	6
38	Dynamic State Estimation Based Unit Protection. , 2019, , .		6
39	Comparison of transformer legacy protective functions and a dynamic state estimation-based approach. Electric Power Systems Research, 2020, 184, 106301.	3.6	6
40	Contingency Simulation Using Single Phase Quadratized Power Flow. , 2006, , .		5
41	Advanced synchrophasor applications. , 2010, , .		5
42	The modeling of a two-diode photovoltaic module for power system simulations. , 2015, , .		5
43	Unit Commitment and Probabilistic Reliability Assessment of Power Systems with Solar Generation. , 2019, , .		5
44	Multi-Stage Quadratic Flexible Optimal Power Flow With a Rolling Horizon. IEEE Transactions on Smart Grid, 2021, 12, 3128-3137.	9.0	5
45	An sequential linear programming algorithm for security-constrained optimal power flow. , 2009, , .		4
46	Reliability evaluation with cost analysis of alternate wind energy farms and interconnections. , 2012, , .		4
47	The extraction of photovoltaic module parameters using Fibonacci and Steepest Descent methods. , 2015, , .		4
48	Analytical Estimation of MMC Short-Circuit Currents in the AC In-Feed Steady-State Stage. IEEE Transactions on Power Delivery, 2022, 37, 431-441.	4.3	4
49	Autonomous Multi-Stage Flexible OPF for Active Distribution Systems with DERs. , 2019, , .		4
50	An Online Approach to Covert Attack Detection and Identification in Power Systems. IEEE Transactions on Power Systems, 2023, 38, 267-277.	6.5	4
51	Voltage recovery phenomena in distribution feeders. , 2008, , .		3
52	Symbolic integration and autonomous state estimation: Building blocks for an intelligent power grid. , 2011, , .		3
53	Cost analysis and optimal kV level selection of alternate wind farms. , 2013, , .		3
54	Transformer inter-turn faults detection by dynamic state estimation method. , 2016, , .		3

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55	Modeling of Converter Losses with High Fidelity in a Physically Based Object-Oriented Way. , 2018, , .		3
56	A Performance Comparison Study of Quasi-Dynamic State Estimation and Static State Estimation. , 2020, , .		3
57	Transient response improvement of doubly-fed induction machine during unbalanced network. , 2013, , .		2
58	Setting-less transformer protection for ensuring security and dependability. Electrical Engineering, 2016, 98, 283-297.	2.0	2
59	Object-Oriented Voltage Control for AC-DC Hybrid Distribution Systems. , 2018, , .		2
60	Distribution Network Voltage Profile Optimization via Multi-Stage Flexible Optimal Power Flow. , 2019, , .		2
61	Grid Services Optimization From Multiple Microgrids. IEEE Transactions on Smart Grid, 2022, 13, 8-19.	9.0	2
62	Dynamic State Estimation Based Protection for Flexible DC Grid. IEEE Transactions on Industrial Electronics, 2023, 70, 3069-3079.	7.9	2
63	Advanced extended-term simulation approach with flexible quasisteady-state and dynamic semi-analytical simulation engines. , 2022, 1, 124-132.		2
64	Quasi-Dynamic Domain Modeling and Simulation of Voltage Source Converters. , 2022, , .		2
65	Composite Power System Reliability with Renewables and Customer Flexibility. , 2022, , .		2
66	Voltage-load dynamics: Modeling and control. , 2007, , .		1
67	Detailed Multiphysics Modeling of Air-Conditioned House. , 2019, , .		1
68	Quasi-Dynamic Domain Modeling of Line-Commutated Converters with the Analytical Approach. , 2019, , .		1
69	Probability state sequence method for reliability analysis of wind farms considering wake effect. , 2013, , .		0
70	Aggregate equivalent models of flexible distribution systems for transmission-level studies. , 2015, , .		0
71	Optimal allocation of wind turbine generator in active distribution network. IEEJ Transactions on Electrical and Electronic Engineering, 2017, 12, 817-824.	1.4	0
72	Object-Oriented Security Constrained Quadratic Optimal Power Flow. , 2020, , .		0

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73	Detection and Protection Against Geomagnetically Induced Current via Harmonic Signature Analysis. , 2022, , .		0