

Mario Paolone

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/992491/publications.pdf>

Version: 2024-02-01

311
papers

9,947
citations

43973

48
h-index

49773

87
g-index

314
all docs

314
docs citations

314
times ranked

6317
citing authors

#	ARTICLE	IF	CITATIONS
1	Optimal Co-Planning of ESSs and Line Reinforcement Considering the Dispatchability of Active Distribution Networks. IEEE Transactions on Power Systems, 2023, 38, 2485-2499.	4.6	9
2	Linear Recursive State Estimation of Hybrid and Unbalanced AC/DC Micro-Grids Using Synchronized Measurements. IEEE Transactions on Smart Grid, 2023, 14, 54-67.	6.2	2
3	A Real-Time Synchrophasor Data Compression Method Using Singular Value Decomposition. IEEE Transactions on Smart Grid, 2022, 13, 564-575.	6.2	6
4	Characterization of Non-Stationary Signals in Electric Grids: A Functional Dictionary Approach. IEEE Transactions on Power Systems, 2022, 37, 1126-1138.	4.6	9
5	Harmonic Power-Flow Study of Polyphase Grids With Converter-Interfaced Distributed Energy Resources—Part II: Model Library and Validation. IEEE Transactions on Smart Grid, 2022, 13, 470-481.	6.2	3
6	Harmonic Power-Flow Study of Polyphase Grids With Converter-Interfaced Distributed Energy Resources—Part I: Modeling Framework and Algorithm. IEEE Transactions on Smart Grid, 2022, 13, 458-469.	6.2	12
7	A Data-Driven Fault Location Algorithm Based on the Electromagnetic Time Reversal in Mismatched Media. IEEE Transactions on Power Delivery, 2022, 37, 3709-3721.	2.9	4
8	Step Change Detection for Improved ROCOF Evaluation of Power System Waveforms. , 2022, , .		4
9	Dispatch-aware planning of energy storage systems in active distribution network. Electric Power Systems Research, 2021, 190, 106644.	2.1	9
10	Optimal Allocation of ESSs in Active Distribution Networks to Achieve Their Dispatchability. IEEE Transactions on Power Systems, 2021, 36, 2068-2081.	4.6	10
11	Siting and Sizing of Energy Storage Systems: Towards a Unified Approach for Transmission and Distribution System Operators for Reserve Provision and Grid Support. Electric Power Systems Research, 2021, 190, 106660.	2.1	12
12	Optimal provision of concurrent primary frequency and local voltage control from a BESS considering variable capability curves: Modelling and experimental assessment. Electric Power Systems Research, 2021, 190, 106643.	2.1	22
13	Countrywide PV hosting capacity and energy storage requirements for distribution networks: The case of Switzerland. Applied Energy, 2021, 281, 116010.	5.1	38
14	Grid-Aware Distributed Model Predictive Control of Heterogeneous Resources in a Distribution Network: Theory and Experimental Validation. IEEE Transactions on Energy Conversion, 2021, 36, 1392-1402.	3.7	22
15	A Closed Time-Reversal Cavity for Electromagnetic Waves in Transmission Line Networks. IEEE Transactions on Antennas and Propagation, 2021, 69, 1621-1630.	3.1	8
16	Leverage Point Identification Method for LAV-Based State Estimation. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-10.	2.4	9
17	Optimal Coordination of Phasor Data Concentrators in Hierarchical Synchrophasor Networks. IEEE Transactions on Smart Grid, 2021, 12, 2402-2412.	6.2	3
18	Characterization of Real-World Power System Signals in Non-Stationary Conditions using a Dictionary Approach. , 2021, , .		2

#	ARTICLE	IF	CITATIONS
19	Analytical Computation of Power Grids's™ Sensitivity Coefficients with Voltage-Dependent Injections. , 2021, , .		3
20	Experimental facility for reduced scale model testing of hydraulic machines hybridized with a battery energy storage system. IOP Conference Series: Earth and Environmental Science, 2021, 774, 012119.	0.2	0
21	Performance Comparison of Alternating Direction Optimization Methods for Linear-OPF based Real-time Predictive Control. , 2021, , .		1
22	OPF-driven Under Frequency Load Shedding in Low-Inertia Power Grids Hosting Large-scale Battery Energy Storage Systems. , 2021, , .		2
23	Digitalization in hydropower generation: development and numerical validation of a model-based Smart Power Plant Supervisor. IOP Conference Series: Earth and Environmental Science, 2021, 774, 012107.	0.2	2
24	Performance assessment of grid-forming and grid-following converter-interfaced battery energy storage systems on frequency regulation in low-inertia power grids. Sustainable Energy, Grids and Networks, 2021, 27, 100496.	2.3	37
25	Time-Synchronization Attack Detection in Unbalanced Three-Phase Systems. IEEE Transactions on Smart Grid, 2021, 12, 4460-4470.	6.2	5
26	Operational-driven optimal-design of a hyperloop system. Transportation Engineering, 2021, 5, 100079.	2.3	6
27	Real-Time Control of Battery Energy Storage Systems to Provide Ancillary Services Considering Voltage-Dependent Capability of DC-AC Converters. IEEE Transactions on Smart Grid, 2021, 12, 4164-4175.	6.2	10
28	Improving frequency containment reserve provision in run-of-river hydropower plants. Sustainable Energy, Grids and Networks, 2021, 28, 100538.	2.3	3
29	Compound Admittance Matrix Estimation of Three-Phase Untransposed Power Distribution Grids Using Synchrophasor Measurements. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-13.	2.4	19
30	An Experimental Study on Electromagnetic Time Reversal Focusing Property in Mismatched Media. , 2021, , .		0
31	Feasibility of Time-Synchronization Attacks Against PMU-Based State Estimation. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 3412-3427.	2.4	28
32	Microgrid Stability Definitions, Analysis, and Examples. IEEE Transactions on Power Systems, 2020, 35, 13-29.	4.6	422
33	Time reversal applied to fault location in power networks: Pilot test results and analyses. International Journal of Electrical Power and Energy Systems, 2020, 114, 105382.	3.3	22
34	Impact of Synchrophasor Estimation Algorithms in ROCOF-Based Under-Frequency Load-Shedding. IEEE Transactions on Power Systems, 2020, 35, 1305-1316.	4.6	33
35	The White Rabbit Time Synchronization Protocol for Synchrophasor Networks. IEEE Transactions on Smart Grid, 2020, 11, 726-738.	6.2	27
36	Electromagnetic Time Reversal Similarity Characteristics and Its Application to Locating Faults in Power Networks. IEEE Transactions on Power Delivery, 2020, 35, 1735-1748.	2.9	16

#	ARTICLE	IF	CITATIONS
37	Performance Comparative Assessment of Grid Connected Power Converters Control Strategies. , 2020, , .		2
38	Frequency stability assessment of modern power systems: Models definition and parameters identification. Sustainable Energy, Grids and Networks, 2020, 23, 100384.	2.3	9
39	Fundamentals of power systems modelling in the presence of converter-interfaced generation. Electric Power Systems Research, 2020, 189, 106811.	2.1	107
40	OPF-based under frequency load shedding predicting the dynamic frequency trajectory. Electric Power Systems Research, 2020, 189, 106748.	2.1	10
41	Design and experimental validation of an FPGA-based PMU simultaneously compliant with P and M performance classes. Electric Power Systems Research, 2020, 189, 106650.	2.1	9
42	Properties of convex optimal power flow model based on power loss relaxation. Electric Power Systems Research, 2020, 186, 106414.	2.1	12
43	A receding horizon control approach for re-dispatching stochastic heterogeneous resources accounting for grid and battery losses. Electric Power Systems Research, 2020, 185, 106340.	2.1	10
44	Real-Time Processing and Quality Improvement of Synchrophasor Data. IEEE Transactions on Smart Grid, 2020, 11, 3313-3324.	6.2	15
45	Parameter Estimation of Three-Phase Untransposed Short Transmission Lines From Synchrophasor Measurements. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 6143-6154.	2.4	27
46	Beyond Phasors: Modeling of Power System Signals Using the Hilbert Transform. IEEE Transactions on Power Systems, 2020, 35, 2971-2980.	4.6	24
47	Guest Editorial Theory and Application of PMUs in Power Distribution Systems. IEEE Transactions on Smart Grid, 2020, 11, 723-725.	6.2	2
48	Real-Time Control of an Electric Vehicle Charging Station While Tracking an Aggregated Power Setpoint. IEEE Transactions on Industry Applications, 2020, 56, 5750-5761.	3.3	9
49	PMU-based linear state estimation of Lausanne subtransmission network: Experimental validation. Electric Power Systems Research, 2020, 189, 106649.	2.1	22
50	Grid-aware distributed control of electric vehicle charging stations in active distribution grids. Electric Power Systems Research, 2020, 189, 106697.	2.1	16
51	Effect of voltage source converters with electrochemical storage systems on dynamics of reduced-inertia bulk power grids. Electric Power Systems Research, 2020, 189, 106766.	2.1	11
52	Photoproduction of $\hat{\cdot}$ mesons off the proton for $1.2 < E \hat{3} < 4.7 \text{ GeV}$ using CLAS at Jefferson Laboratory. Physical Review C, 2020, 102, .	1.1	2
53	Technologies for Integration of Large-Scale Distributed Generation and Volatile Loads in Distribution Grids: Technologies for Integration of Large-Scale Renewables Multi-slot EV Charging Stations in Distribution Grids. Lecture Notes in Electrical Engineering, 2020, , 179-188.	0.3	0
54	On the Properties of the Compound Nodal Admittance Matrix of Polyphase Power Systems. IEEE Transactions on Power Systems, 2019, 34, 444-453.	4.6	20

#	ARTICLE	IF	CITATIONS
55	Statistical Model of Measurement Noise in Real-World PMU-based Acquisitions. , 2019, , .		10
56	A Generalized Index for Static Voltage Stability of Unbalanced Polyphase Power Systems Including Thévenin Equivalents and Polynomial Models. IEEE Transactions on Power Systems, 2019, 34, 4630-4639.	4.6	11
57	Characterization of uncertainty contributions in a high-accuracy PMU validation system. Measurement: Journal of the International Measurement Confederation, 2019, 146, 72-86.	2.5	15
58	Solar irradiance estimations for modeling the variability of photovoltaic generation and assessing violations of grid constraints: A comparison between satellite and pyranometers measurements with load flow simulations. Journal of Renewable and Sustainable Energy, 2019, 11, 056103.	0.8	9
59	Taylor-Fourier PMU on a Real-Time Simulator: Design, Implementation and Characterization. , 2019, , .		19
60	Properties of Direct-Time and Reversed-Time Transfer Functions to Locate Disturbances along Power Transmission Lines. , 2019, , .		1
61	Ultra Fast Linear State Estimation Utilizing SCADA Measurements. IEEE Transactions on Power Systems, 2019, 34, 2622-2631.	4.6	32
62	PMU-Based ROCOF Measurements: Uncertainty Limits and Metrological Significance in Power System Applications. IEEE Transactions on Instrumentation and Measurement, 2019, 68, 3810-3822.	2.4	68
63	Impact of Fundamental Frequency Definition in IpDFT-based PMU Estimates in Fault Conditions. , 2019, , .		2
64	Impact of Time Dissemination Technologies on Synchrophasor Estimation Accuracy. , 2019, , .		4
65	Real-Scenario Testing of an Active Phasor Data Concentrator. , 2019, , .		1
66	Influence of Battery Models on the Optimal Design of the Propulsion System of a Hyperloop Capsule. , 2019, , .		4
67	Using Electromagnetic Time Reversal Similarity Metric to Locate Lightning-Originated Flashovers on Overhead Transmission Lines. , 2019, , .		0
68	Performance Assessment of Kron Reduction in the Numerical Analysis of Polyphase Power Systems. , 2019, , .		0
69	Performance Assessment of Linearized OPF-based Distributed Real-time Predictive Control. , 2019, , .		7
70	A Robust Optimization Framework for the Day-Ahead Scheduling of Active Distribution Networks including Energy Storage Systems. , 2019, , .		2
71	Optimal Design of the Propulsion System of a Hyperloop Capsule. IEEE Transactions on Transportation Electrification, 2019, 5, 1406-1418.	5.3	20
72	A New Approach to the Online Estimation of the Loss of Generation Size in Power Systems. IEEE Transactions on Power Systems, 2019, 34, 2103-2113.	4.6	20

#	ARTICLE	IF	CITATIONS
73	Reduced Leakage Synchrophasor Estimation: Hilbert Transform Plus Interpolated DFT. IEEE Transactions on Instrumentation and Measurement, 2019, 68, 3468-3483.	2.4	32
74	A Modified Formula for Distance Relaying of Tapped Transmission Lines With Grounded Neutrals. IEEE Transactions on Power Delivery, 2019, 34, 690-699.	2.9	12
75	Controlling the Electrical State via Uncertain Power Injections in Three-Phase Distribution Networks. IEEE Transactions on Smart Grid, 2019, 10, 1349-1362.	6.2	6
76	Control of Battery Storage Systems for the Simultaneous Provision of Multiple Services. IEEE Transactions on Smart Grid, 2019, 10, 2799-2808.	6.2	88
77	Swiss competence center on energy research FURIES - Overview and contributions in the area of power electronics and SmartGrids. , 2019, , .		0
78	Experimental Validation of a Steady State Model Synthesis Method for a Three-Phase Unbalanced Active Distribution Network Feeder. IEEE Access, 2018, 6, 4042-4053.	2.6	8
79	Vacuum circuit breaker modelling for the assessment of transient recovery voltages: Application to various network configurations. Electric Power Systems Research, 2018, 156, 35-43.	2.1	19
80	Concurrent Voltage Control and Dispatch of Active Distribution Networks by Means of Smart Transformer and Storage. IEEE Transactions on Industrial Electronics, 2018, 65, 6657-6666.	5.2	46
81	A Full-Scale Experimental Validation of Electromagnetic Time Reversal Applied to Locate Disturbances in Overhead Power Distribution Lines. IEEE Transactions on Electromagnetic Compatibility, 2018, 60, 1562-1570.	1.4	42
82	Unsupervised Disaggregation of Photovoltaic Production From Composite Power Flow Measurements of Heterogeneous Prosumers. IEEE Transactions on Industrial Informatics, 2018, 14, 3904-3913.	7.2	50
83	Experimental Validation of an Explicit Power-Flow Primary Control in Microgrids. IEEE Transactions on Industrial Informatics, 2018, 14, 4779-4791.	7.2	9
84	A Comprehensive Assessment of the Short-Term Uncertainty of Grid-Connected PV Systems. IEEE Transactions on Sustainable Energy, 2018, 9, 1458-1467.	5.9	32
85	Extension of the Unmatched-Media Time Reversal Method to Locate Soft Faults in Transmission Lines. IEEE Transactions on Electromagnetic Compatibility, 2018, 60, 1539-1545.	1.4	13
86	Iterative-Interpolated DFT for Synchrophasor Estimation: A Single Algorithm for P- and M-Class Compliant PMUs. IEEE Transactions on Instrumentation and Measurement, 2018, 67, 547-558.	2.4	128
87	Locating lightning strikes and flashovers along overhead power transmission lines using electromagnetic time reversal. Electric Power Systems Research, 2018, 160, 282-291.	2.1	18
88	Explicit Conditions on Existence and Uniqueness of Load-Flow Solutions in Distribution Networks. IEEE Transactions on Smart Grid, 2018, 9, 953-962.	6.2	70
89	Architecture and Experimental Validation of a Low-Latency Phasor Data Concentrator. IEEE Transactions on Smart Grid, 2018, 9, 2885-2893.	6.2	42
90	A Decentralized Adaptive Model-Based Real-Time Control for Active Distribution Networks Using Battery Energy Storage Systems. IEEE Transactions on Smart Grid, 2018, 9, 3406-3418.	6.2	42

#	ARTICLE	IF	CITATIONS
91	Undetectable Timing-Attack on Linear State-Estimation by Using Rank-1 Approximation. IEEE Transactions on Smart Grid, 2018, 9, 3530-3542.	6.2	25
92	Voltage Control in Active Distribution Networks Under Uncertainty in the System Model: A Robust Optimization Approach. IEEE Transactions on Smart Grid, 2018, 9, 5631-5642.	6.2	50
93	Photovoltaic-Model-Based Solar Irradiance Estimators: Performance Comparison and Application to Maximum Power Forecasting. IEEE Transactions on Sustainable Energy, 2018, 9, 35-44.	5.9	40
94	Dispatching Stochastic Heterogeneous Resources Accounting for Grid and Battery Losses. IEEE Transactions on Smart Grid, 2018, 9, 6522-6539.	6.2	37
95	An Exact Convex Formulation of the Optimal Power Flow in Radial Distribution Networks Including Transverse Components. IEEE Transactions on Automatic Control, 2018, 63, 682-697.	3.6	69
96	On the Properties of the Power Systems Nodal Admittance Matrix. IEEE Transactions on Power Systems, 2018, 33, 1130-1131.	4.6	22
97	Optimal Planning of Distributed Energy Storage Systems in Active Distribution Networks Embedding Grid Reconfiguration. IEEE Transactions on Power Systems, 2018, 33, 1577-1590.	4.6	134
98	Experimental Assessment of the Prediction Performance of Dynamic Equivalent Circuit Models of Grid-Connected Battery Energy Storage Systems. , 2018, , .		5
99	Under Frequency Load Shedding based on PMU Estimates of Frequency and ROCOF. , 2018, , .		15
100	Slack Selection for Unintentional Islanding: Practical Validation in a Benchmark Microgrid. , 2018, , .		0
101	Robust Real-Time Control of Power Grids in the Presence of Communication Network Non-Idealities. , 2018, , .		2
102	An ADMM-Based Coordination and Control Strategy for PV and Storage to Dispatch Stochastic Prosumers: Theory and Experimental Validation. , 2018, , .		4
103	Dispatch and Primary Frequency Control With Electrochemical Storage: A System-wise Verification. , 2018, , .		5
104	Synchrophasor-Based ROCOF Measurements: Feasibility in Real-World Scenarios. , 2018, , .		3
105	An Econometric Model of the Regulating Power Price for Interconnected Power Systems: The Case of the Nord Pool Market. , 2018, , .		4
106	Quantification of Primary Frequency Control Provision from Battery Energy Storage Systems Connected to Active Distribution Networks. , 2018, , .		6
107	Service Restoration in DG-Integrated Distribution Networks Using an Exact Convex OPF Model. , 2018, , .		5
108	Design and Experimental Validation of an LTE-Based Synchrophasor Network in a Medium Voltage Distribution Grid. , 2018, , .		2

#	ARTICLE	IF	CITATIONS
109	Electromagnetic Time Reversal Applied to Fault Location: On the Properties of Back-Injected Signals. , 2018, , .		13
110	Local estimation of the global horizontal irradiance using an all-sky camera. Solar Energy, 2018, 173, 1225-1235.	2.9	16
111	Enhancing the dispatchability of distribution networks through utility-scale batteries and flexible demand. Energy and Buildings, 2018, 172, 125-138.	3.1	11
112	Modeling of different charge transfer modes in upward flashes constrained by simultaneously measured currents and fields. , 2018, , .		8
113	Influencing the bulk power system reserve by dispatching power distribution networks using local energy storage. Electric Power Systems Research, 2018, 163, 270-279.	2.1	20
114	Fault Detection and Faulted Line Identification in Active Distribution Networks Using Synchrophasors-Based Real-Time State Estimation. IEEE Transactions on Power Delivery, 2017, 32, 381-392.	2.9	190
115	AC OPF in radial distribution networks " Part II: An augmented Lagrangian-based OPF algorithm, distributable via primal decomposition. Electric Power Systems Research, 2017, 150, 24-35.	2.1	23
116	Parameter identification of a lithium-ion cell single-particle model through non-invasive testing. Journal of Energy Storage, 2017, 12, 138-148.	3.9	29
117	Analysis of lightning-ionosphere interaction using simultaneous records of source current and 380Åkm distant electric field. Journal of Atmospheric and Solar-Terrestrial Physics, 2017, 159, 48-56.	0.6	20
118	Definition of Accurate Reference Synchrophasors for Static and Dynamic Characterization of PMUs. IEEE Transactions on Instrumentation and Measurement, 2017, 66, 2233-2246.	2.4	47
119	Sequential Discrete Kalman Filter for Real-Time State Estimation in Power Distribution Systems: Theory and Implementation. IEEE Transactions on Instrumentation and Measurement, 2017, 66, 2358-2370.	2.4	51
120	An Alternative Method for Locating Faults in Transmission Line Networks Based on Time Reversal. IEEE Transactions on Electromagnetic Compatibility, 2017, 59, 1601-1612.	1.4	59
121	A Prediction-Error Covariance Estimator for Adaptive Kalman Filtering in Step-Varying Processes: Application to Power-System State Estimation. IEEE Transactions on Control Systems Technology, 2017, 25, 1683-1697.	3.2	50
122	AC OPF in radial distribution networks " Part I: On the limits of the branch flow convexification and the alternating direction method of multipliers. Electric Power Systems Research, 2017, 143, 438-450.	2.1	52
123	Dispatching active distribution networks through electrochemical storage systems and demand side management. , 2017, , .		2
124	Real-time power-reference tracking method for PV converters. , 2017, , .		3
125	Single-end FPGA-based fault location system for radial/meshed AC/DC networks based on the electromagnetic time reversal theory. , 2017, , .		5
126	Assessment of the influence of losses on the performance of the electromagnetic time reversal fault location method. , 2017, , .		3

#	ARTICLE	IF	CITATIONS
127	A high-performance, low-cost PMU prototype for distribution networks based on FPGA. , 2017, , .		31
128	Fault detection and faulted line identification in active distribution networks using synchrophasors-based real-time state estimation. , 2017, , .		2
129	A model-based filtering strategy to reconstruct the maximum power generation of curtailed photovoltaic installations: Application to forecasting. , 2017, , .		0
130	Battery storage system optimal exploitation through physics-based model predictive control. , 2017, , .		0
131	Enhancing the provision of ancillary services from storage systems using smart transformer and smart meters. , 2017, , .		3
132	Simultaneous records of current and 380-km distant electric field of a bipolar lightning flash. , 2017, , .		0
133	Enhanced Equivalent Electrical Circuit Model of Lithium-Based Batteries Accounting for Charge Redistribution, State-of-Health, and Temperature Effects. IEEE Transactions on Transportation Electrification, 2017, 3, 589-599.	5.3	30
134	Existence and Uniqueness of Load-Flow Solutions in Three-Phase Distribution Networks. IEEE Transactions on Power Systems, 2017, 32, 3319-3320.	4.6	29
135	Assessment of the Influence of Losses on the Performance of the Electromagnetic Time Reversal Fault Location Method. IEEE Transactions on Power Delivery, 2017, 32, 2303-2312.	2.9	43
136	A white rabbit synchronized PMU. , 2017, , .		8
137	Using electromagnetic time reversal to locate faults in transmission lines: Definition and application of the "Mirrored Minimum Energy" property. , 2017, , .		25
138	Achieving the dispatchability of distribution feeders through prosumers data driven forecasting and model predictive control of electrochemical storage. , 2017, , .		2
139	Iterative-interpolated DFT for synchrophasor estimation in M-class compliant PMUs. , 2017, , .		10
140	Fair control of distributed PV plants in low voltage grids. , 2017, , .		2
141	Cloud Motion Identification Algorithms Based on All-Sky Images to Support Solar Irradiance Forecast. , 2017, , .		7
142	A continuum of undetectable timing-attacks on PMU-based linear state-estimation. , 2017, , .		6
143	Handling large power steps in real-time microgrid control via explicit power setpoints. , 2017, , .		2
144	Evaluation of the performance characteristics of the European Lightning Detection Network EUCLID in the Alps region for upward negative flashes using direct measurements at the instrumented SÅntis Tower. Journal of Geophysical Research D: Atmospheres, 2016, 121, 595-606.	1.2	37

#	ARTICLE	IF	CITATIONS
145	Assessment of battery ageing and implementation of an ageing aware control strategy for a load leveling application of a lithium titanate battery energy storage system. , 2016, , .		15
146	Aggregation of power capabilities of heterogeneous resources for real-time control of power grids. , 2016, , .		8
147	Voltage stability analysis using a complete model of grid-connected voltage-source converters. , 2016, , .		9
148	Load leveling and dispatchability of a medium voltage active feeder through battery energy storage systems: Formulation of the control problem and experimental validation. , 2016, , .		5
149	Bipolar lightning flashes observed at the SÅntis Tower: Do we need to modify the traditional classification?. Journal of Geophysical Research D: Atmospheres, 2016, 121, 14,117.	1.2	11
150	Ultra-short-term prediction intervals of photovoltaic AC active power. , 2016, , .		6
151	Integration and Operation of Utility-Scale Battery Energy Storage Systems: the EPFLâ€™s Experience. IFAC-PapersOnLine, 2016, 49, 433-438.	0.5	9
152	Acoustic energy harvesting using Electrochemical Double Layer Capacitors: Technical feasibility and performance assessment. , 2016, , .		1
153	Modelling of current and temperature effects on supercapacitors ageing. Part II: State-of-Health assessment. Journal of Energy Storage, 2016, 5, 95-101.	3.9	24
154	Decentralized voltage control of clustered active distribution network by means of energy storage systems. Electric Power Systems Research, 2016, 136, 370-382.	2.1	46
155	Modelling of current and temperature effects on supercapacitors ageing. Part I: Review of driving phenomenology. Journal of Energy Storage, 2016, 5, 85-94.	3.9	18
156	Intra-day electro-thermal model predictive control for polygeneration systems in microgrids. Energy, 2016, 104, 308-319.	4.5	20
157	Large scale deployment of PV units in existing distribution networks: Optimization of the installation layout. , 2016, , .		1
158	Irradiance prediction intervals for PV stochastic generation in microgrid applications. Solar Energy, 2016, 139, 116-129.	2.9	41
159	An adaptive model-based real-time voltage control process for Active Distribution Networks using Battery Energy Storage Systems. , 2016, , .		4
160	Model-less/measurement-based computation of voltage sensitivities in unbalanced electrical distribution networks. , 2016, , .		30
161	Fast initial continuous current pulses versus return stroke pulses in towerâ€™initiated lightning. Journal of Geophysical Research D: Atmospheres, 2016, 121, 6425-6434.	1.2	19
162	Achieving the Dispatchability of Distribution Feeders Through Prosumers Data Driven Forecasting and Model Predictive Control of Electrochemical Storage. IEEE Transactions on Sustainable Energy, 2016, 7, 1762-1777.	5.9	99

#	ARTICLE	IF	CITATIONS
163	An automated FPGA real-time simulator for power electronics and power systems electromagnetic transient applications. Electric Power Systems Research, 2016, 141, 147-156.	2.1	22
164	Hardware-in-the-Loop validation of the Grid Explicit Congestion Notification mechanism for primary voltage control in Active Distribution Networks. , 2016, , .		4
165	Nonparametric Estimation of Surface Temperature of Li-Ion Cells Using Thermal Impulse Response. IEEE Transactions on Transportation Electrification, 2016, 2, 407-416.	5.3	5
166	Definition and assessment of reference values for PMU calibration in static and transient conditions. , 2016, , .		6
167	Locating Faults on Untransposed, Meshed Transmission Networks Using a Limited Number of Synchrophasor Measurements. IEEE Transactions on Power Systems, 2016, 31, 4462-4472.	4.6	41
168	Performance Assessment of Linear State Estimators Using Synchrophasor Measurements. IEEE Transactions on Instrumentation and Measurement, 2016, 65, 535-548.	2.4	61
169	Model-free computation of ultra-short-term prediction intervals of solar irradiance. Solar Energy, 2016, 124, 57-67.	2.9	22
170	On Lightning Electromagnetic Field Propagation Along an Irregular Terrain. IEEE Transactions on Electromagnetic Compatibility, 2016, 58, 161-171.	1.4	56
171	Security Constrained Unit Commitment With Dynamic Thermal Line Rating. IEEE Transactions on Power Systems, 2016, 31, 2014-2025.	4.6	74
172	An update on experimental data obtained at the Säntis Tower. , 2015, , .		1
173	Architecture and characterization of a calibrator for PMUs operating in power distribution systems. , 2015, , .		15
174	An Information-Centric Communication Infrastructure for Real-Time State Estimation of Active Distribution Networks. IEEE Transactions on Smart Grid, 2015, 6, 2134-2146.	6.2	61
175	Integration of IEEE C37.118 and publish/subscribe communication. , 2015, , .		5
176	A supercapacitor agent for providing real-time power services to the grid. , 2015, , .		2
177	Integration of Transmission Lines Dynamic Thermal rating into real-time Optimal dispatching of power systems. , 2015, , .		9
178	Surface temperature estimation of li-ion battery via thermal impulse response technique. , 2015, , .		4
179	Control of a battery energy storage system accounting for the charge redistribution effect to dispatch the operation of a medium voltage feeder. , 2015, , .		4
180	Characteristics of electric fields of upward negative stepped leaders. , 2015, , .		5

#	ARTICLE	IF	CITATIONS
181	Network clustering for voltage control in active distribution network including energy storage systems. , 2015, , .		14
182	A composable method for real-time control of active distribution networks with explicit power setpoints. Part II: Implementation and validation. Electric Power Systems Research, 2015, 125, 265-280.	2.1	43
183	A composable method for real-time control of active distribution networks with explicit power setpoints. Part I: Framework. Electric Power Systems Research, 2015, 125, 254-264.	2.1	113
184	Optimal siting and sizing of distributed energy storage systems via alternating direction method of multipliers. International Journal of Electrical Power and Energy Systems, 2015, 72, 33-39.	3.3	99
185	Real-Time Simulation Technologies for Power Systems Design, Testing, and Analysis. IEEE Power and Energy Technology Systems Journal, 2015, 2, 63-73.	3.5	359
186	Impact of synchrophasor measurement types and uncertainties on the accuracy of distribution system linear state estimators. , 2015, , .		3
187	Applications of Real-Time Simulation Technologies in Power and Energy Systems. IEEE Power and Energy Technology Systems Journal, 2015, 2, 103-115.	3.5	149
188	Electromagnetic time reversal applied to fault detection: The issue of losses. , 2015, , .		8
189	Integration of an IEEE Std. C37.118 compliant PMU into a real-time simulator. , 2015, , .		14
190	Real-time state estimation of the EPFL-campus medium-voltage grid by using PMUs. , 2015, , .		94
191	Real-time control of microgrids with explicit power setpoints: Unintentional islanding. , 2015, , .		7
192	A Hardware-in-the-Loop test platform for the performance assessment of a PMU-based Real-Time State Estimator for Active Distribution Networks. , 2015, , .		16
193	Macroscopic indicators of fault diagnosis and ageing in electrochemical double layer capacitors. Journal of Energy Storage, 2015, 2, 8-24.	3.9	25
194	Evaluation of Lightning-Induced Currents on Cables Buried in a Lossy Dispersive Ground. IEEE Transactions on Electromagnetic Compatibility, 2014, 56, 1522-1529.	1.4	25
195	A pre-estimation filtering process of bad data for linear power systems state estimators using PMUs. , 2014, , .		28
196	An enhanced interpolated-modulated sliding DFT for high reporting rate PMUs. , 2014, , .		24
197	Enhanced Interpolated-DFT for Synchrophasor Estimation in FPGAs: Theory, Implementation, and Validation of a PMU Prototype. IEEE Transactions on Instrumentation and Measurement, 2014, 63, 2824-2836.	2.4	268
198	An update on the characteristics of positive flashes recorded on the Säntis Tower. , 2014, , .		7

#	ARTICLE	IF	CITATIONS
199	Enhanced electrical model of Lithium-based batteries accounting the charge redistribution effect. , 2014, , .		13
200	Optimal siting and sizing of distributed energy storage systems via alternating direction method of multipliers. , 2014, , .		7
201	Stochastic day-ahead optimal scheduling of Active Distribution Networks with dispersed energy storage and renewable resources. , 2014, , .		6
202	Probabilistic assessment of the process-noise covariance matrix of discrete Kalman filter state estimation of active distribution networks. , 2014, , .		31
203	Electric space heating scheduling for real-time explicit power control in active distribution networks. , 2014, , .		2
204	Understanding the ageing process, recovering phase and fault diagnosis of electrochemical double layer capacitors. , 2014, , .		4
205	Fault location in multi-terminal HVDC networks based on Electromagnetic Time Reversal with limited time reversal window. , 2014, , .		31
206	A method for the assessment of the optimal parameter of discrete-time switch model. Electric Power Systems Research, 2014, 115, 80-86.	2.1	8
207	Lightning Electromagnetic Fields and Their Induced Currents on Buried Cables. Part II: The Effect of a Horizontally Stratified Ground. IEEE Transactions on Electromagnetic Compatibility, 2014, 56, 1146-1154.	1.4	36
208	GECN: Primary Voltage Control for Active Distribution Networks via Real-Time Demand-Response. IEEE Transactions on Smart Grid, 2014, 5, 622-631.	6.2	81
209	Information-centric networking for machine-to-machine data delivery: a case study in smart grid applications. IEEE Network, 2014, 28, 58-64.	4.9	75
210	Improvement of Dynamic Modeling of Supercapacitor by Residual Charge Effect Estimation. IEEE Transactions on Industrial Electronics, 2014, 61, 1345-1354.	5.2	76
211	Primary Voltage Control in Active Distribution Networks via Broadcast Signals: The Case of Distributed Storage. IEEE Transactions on Smart Grid, 2014, 5, 2314-2325.	6.2	41
212	Integrated voltage control and line congestion management in Active Distribution Networks by means of smart transformers. , 2014, , .		27
213	Inter-area frequency control reserve assessment regarding dynamics of cascading outages and blackouts. Electric Power Systems Research, 2014, 107, 144-152.	2.1	21
214	A model predictive control strategy for the space heating of a smart building including cogeneration of a fuel cell-electrolyzer system. International Journal of Electrical Power and Energy Systems, 2014, 62, 879-889.	3.3	36
215	Optimal Allocation of Dispersed Energy Storage Systems in Active Distribution Networks for Energy Balance and Grid Support. IEEE Transactions on Power Systems, 2014, 29, 2300-2310.	4.6	336
216	On the influence of measuring instruments bandwidth limitations on the inferred statistical parameters for lightning currents. , 2014, , .		0

#	ARTICLE	IF	CITATIONS
217	Efficient Computation of Sensitivity Coefficients of Node Voltages and Line Currents in Unbalanced Radial Electrical Distribution Networks. IEEE Transactions on Smart Grid, 2013, 4, 741-750.	6.2	219
218	An Efficient Method Based on the Electromagnetic Time Reversal to Locate Faults in Power Networks. IEEE Transactions on Power Delivery, 2013, 28, 1663-1673.	2.9	160
219	Statistical Distributions of Lightning Currents Associated With Upward Negative Flashes Based on the Data Collected at the SAntis (EMC) Tower in 2010 and 2011. IEEE Transactions on Power Delivery, 2013, 28, 1804-1812.	2.9	56
220	Bursts of fast pulses in positive lightning current waveforms recorded on the Säntis tower. , 2013, , .		0
221	On the use of electromagnetic time reversal to locate faults in series-compensated transmission lines. , 2013, , .		22
222	Use of the full-wave Finite Element Method for the numerical electromagnetic analysis of LEMP and its coupling to overhead lines. Electric Power Systems Research, 2013, 94, 24-29.	2.1	36
223	Effects of nearby buildings on lightning induced voltages on overhead power distribution lines. Electric Power Systems Research, 2013, 94, 38-45.	2.1	20
224	Evaluation of Lightning Electromagnetic Fields and Their Induced Voltages on Overhead Lines Considering the Frequency Dependence of Soil Electrical Parameters. IEEE Transactions on Electromagnetic Compatibility, 2013, 55, 1210-1219.	1.4	86
225	Study of optimal design of polygeneration systems in optimal control strategies. Energy, 2013, 55, 134-141.	4.5	43
226	Experimental analysis of a PEM fuel cell performance at variable load with anodic exhaust management optimization. International Journal of Hydrogen Energy, 2013, 38, 385-393.	3.8	46
227	A general purpose FPGA-based real-time simulator for power systems applications. , 2013, , .		12
228	An interpolated-DFT synchrophasor estimation algorithm and its implementation in an FPGA-based PMU prototype. , 2013, , .		17
229	Positive lightning flashes recorded on the SAntis tower from May 2010 to January 2012. Journal of Geophysical Research D: Atmospheres, 2013, 118, 12,879.	1.2	34
230	Optimal location and sizing of distributed storage systems in active distribution networks. , 2013, , .		34
231	Experimental evidences of redistribution phenomenon in supercapacitors and consequent improvement of their dynamic model. , 2013, , .		4
232	Novel experimental investigation of supercapacitor ageing during combined life-endurance and power-cycling tests. , 2013, , .		1
233	Lightning currents measured on the Säntis Tower: A summary of the results obtained in 2010 and 2011. , 2013, , .		8
234	On the FEM and TL approaches for the calculation of lightning - induced voltages on overhead lines. , 2012, , .		0

#	ARTICLE	IF	CITATIONS
235	A statistical analysis on the risetime of lightning current pulses in negative upward flashes measured at Säntis tower. , 2012, , .		3
236	A full-wave analysis of lightning-induced voltages on distribution lines considering the conductive coupling between the lightning channel and the grounding system. , 2012, , .		5
237	Application of the Matrix Pencil Method to Rational Fitting of Frequency-Domain Responses. IEEE Transactions on Power Delivery, 2012, 27, 2399-2408.	2.9	40
238	On the optimal placement of distributed storage systems for voltage control in active distribution networks. , 2012, , .		34
239	Some characteristics of positive and bipolar lightning flashes recorded on the Säntis tower in 2010 and 2011. , 2012, , .		11
240	State estimation of Active Distribution Networks: Comparison between WLS and iterated kalman-filter algorithm integrating PMUs. , 2012, , .		60
241	A new method to locate faults in power networks based on Electromagnetic Time Reversal. , 2012, , .		19
242	A Microcontroller-Based Power Management System for Standalone Microgrids With Hybrid Power Supply. IEEE Transactions on Sustainable Energy, 2012, 3, 422-431.	5.9	132
243	A system for the measurements of lightning currents at the Säntis Tower. Electric Power Systems Research, 2012, 82, 34-43.	2.1	59
244	Current waveforms associated with positive flashes recorded on the säntis tower in summer 2010. , 2011, , .		4
245	Preliminary comparison of data from the Säntis Tower and the EUCLID lightning location system. , 2011, , .		10
246	An automatic system to locate phase-to-ground faults in medium voltage cable networks based on the wavelet analysis of high-frequency signals. , 2011, , .		9
247	Design, Implementation and Testing of an Automatic Power Management System for Residential Stand-alone Microgrids with Hybrid Power Supply. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 13666-13672.	0.4	1
248	Synchronized Phasors Monitoring During the Islanding Maneuver of an Active Distribution Network. IEEE Transactions on Smart Grid, 2011, 2, 82-91.	6.2	204
249	Models of Wind-Turbine Main-Shaft Bearings for the Development of Specific Lightning Protection Systems. IEEE Transactions on Electromagnetic Compatibility, 2011, 53, 99-107.	1.4	38
250	Voltage transient measurements in a distribution network correlated with data from lightning location system and from sequence of events recorders. Electric Power Systems Research, 2011, 81, 237-253.	2.1	19
251	Calculation of lightning-induced voltages on an overhead line taking into account the presence of nearby buildings. , 2011, , .		4
252	Numerical electromagnetic analysis methods and its applications to surge phenomena. , 2011, , .		0

#	ARTICLE	IF	CITATIONS
253	Use of the full-wave finite element method for the numerical electromagnetic analysis of LEMP and its coupling with overhead lines. , 2011, , .		8
254	Interaction between grounding systems and nearby lightning for the calculation of overvoltages in overhead distribution lines. , 2011, , .		7
255	Measurement of lightning currents using a combination of Rogowski coils and B-dot sensors. , 2010, , .		9
256	The impact of the grounding system on the lightning performance of transmission lines: A sensitivity analysis. , 2010, , .		0
257	On the influence of corona on lightning-induced overvoltages. , 2010, , .		2
258	Numerical solution of the Leader Progression Model by means of the Finite Element Method. , 2010, , .		8
259	Voltage transient measurements in a distribution network and sequence of relay events associated to lightning strokes detected by LLS. , 2010, , .		2
260	Monte Carlo based lightning risk assessment in oil plant tank farms. , 2010, , .		11
261	Short-Term Scheduling and Control of Active Distribution Systems With High Penetration of Renewable Resources. IEEE Systems Journal, 2010, 4, 313-322.	2.9	209
262	Synchronized phasors monitoring during the islanding maneuver of an active distribution network. , 2010, , .		10
263	Integrated Use of Time-Frequency Wavelet Decompositions for Fault Location in Distribution Networks: Theory and Experimental Validation. IEEE Transactions on Power Delivery, 2010, 25, 3139-3146.	2.9	187
264	Short-term scheduling of active distribution systems. , 2009, , .		15
265	Analysis of Transmission Lines With Arrester Termination, Considering the Frequency-Dependence of Grounding Systems. IEEE Transactions on Electromagnetic Compatibility, 2009, 51, 986-994.	1.4	11
266	Lightning-Induced Overvoltages Transferred Through Distribution Power Transformers. IEEE Transactions on Power Delivery, 2009, 24, 360-372.	2.9	93
267	Lightning Electromagnetic Field Coupling to Overhead Lines: Theory, Numerical Simulations, and Experimental Validation. IEEE Transactions on Electromagnetic Compatibility, 2009, 51, 532-547.	1.4	99
268	Indirect-Lightning Performance of Overhead Distribution Networks With Complex Topology. IEEE Transactions on Power Delivery, 2009, 24, 2206-2213.	2.9	45
269	Lightning Currents Flowing in the Soil and Entering a Test Power Distribution Line Via Its Grounding. IEEE Transactions on Power Delivery, 2009, 24, 1095-1103.	2.9	26
270	Development of an RTU for synchrophasors estimation in active distribution networks. , 2009, , .		9

#	ARTICLE	IF	CITATIONS
271	A microcontroller-based automatic scheduling system for residential microgrids. , 2009, , .		13
272	A procedure for the automatic scheduling of distributed energy resources in medium voltage networks. , 2009, , .		5
273	Continuous-Wavelet Transform for Fault Location in Distribution Power Networks: Definition of Mother Wavelets Inferred From Fault Originated Transients. IEEE Transactions on Power Systems, 2008, 23, 380-388.	4.6	248
274	Analysis of black-startup and islanding capabilities of a combined cycle power plant. , 2008, , .		4
275	DSP-Controlled Test Set-up for the Performance Assessment of an Autonomous Power Unit Equipped with a PEM Fuel Cell. , 2007, , .		6
276	Optimal Operating Point Calculation for Medium Voltage Distribution Systems. , 2007, , .		3
277	An Improved Procedure for the Assessment of Overhead Line Indirect Lightning Performance and Its Comparison with the IEEE Std. 1410 Method. IEEE Transactions on Power Delivery, 2007, 22, 684-692.	2.9	156
278	Models of Wind-Turbine Main Shaft Bearings for the Development of Specific Lightning Protection Systems. , 2007, , .		17
279	A Scale Model for the Study of the LEMP Response of Complex Power Distribution Networks. IEEE Transactions on Power Delivery, 2007, 22, 710-720.	2.9	92
280	External impedance and admittance of buried horizontal wires for transient studies using transmission line analysis. IEEE Transactions on Dielectrics and Electrical Insulation, 2007, 14, 751-761.	1.8	91
281	A Two-Stage Scheduler of Distributed Energy Resources. , 2007, , .		14
282	Comparative Performance of Medium Voltage Overhead Distribution Lines Designs Submitted to Induced Voltages. , 2007, , .		4
283	Lightning-Related Faults in Power Distribution Networks. , 2007, , .		5
284	An Energy Resource Scheduler Implemented in the Automatic Management System of a Microgrid Test Facility. , 2007, , .		18
285	Determination of lightning currents from far electromagnetic fields: Effect of a strike object. Journal of Electrostatics, 2007, 65, 289-295.	1.0	16
286	Lightning-induced currents in buried coaxial cables: A frequency-domain approach and its validation using rocket-triggered lightning. Journal of Electrostatics, 2007, 65, 322-328.	1.0	16
287	A Statistical Approach for Estimating the Correlation between Lightning and Faults in Power Distribution Systems. , 2006, , .		12
288	A Feasibility Study of an Auxiliary Power Unit Based on a PEM Fuel Cell for On-Board Applications. Journal of Fuel Cell Science and Technology, 2006, 3, 445-451.	0.8	10

#	ARTICLE	IF	CITATIONS
289	On the use of continuous-wavelet transform for fault location in distribution power systems. International Journal of Electrical Power and Energy Systems, 2006, 28, 608-617.	3.3	108
290	Far-Fieldâ€“Current Relationship Based on the TL Model for Lightning Return Strokes to Elevated Strike Objects. IEEE Transactions on Electromagnetic Compatibility, 2005, 47, 146-159.	1.4	76
291	Lightning Induced Disturbances in Buried Cablesâ€”Part I: Theory. IEEE Transactions on Electromagnetic Compatibility, 2005, 47, 498-508.	1.4	123
292	Lightning Induced Disturbances in Buried Cablesâ€”Part II: Experiment and Model Validation. IEEE Transactions on Electromagnetic Compatibility, 2005, 47, 509-520.	1.4	78
293	Bidding strategy selection in a day-ahead electricity auction system. , 2005, , .		1
294	Lightning-induced overvoltages transferred from medium-voltage to low-voltage networks. , 2005, , .		9
295	On the Use of Data From Distributed Measurement Systems for Correlating Voltage Transients to Lightning. IEEE Transactions on Instrumentation and Measurement, 2004, 53, 1202-1208.	2.4	11
296	Lightning-induced voltages on complex distribution systems: models, advanced software tools and experimental validation. Journal of Electrostatics, 2004, 60, 163-174.	1.0	92
297	Nonuniform Transmission Tower Model for Lightning Transient Studies. IEEE Transactions on Power Delivery, 2004, 19, 490-496.	2.9	55
298	Mitigation of Lightning-Induced Overvoltages in Medium Voltage Distribution Lines by Means of Periodical Grounding of Shielding Wires and of Surge Arresters: Modeling and Experimental Validation. IEEE Transactions on Power Delivery, 2004, 19, 423-431.	2.9	157
299	Estimation of the Statistical Distributions of Lightning Current Parameters at Ground Level From the Data Recorded by Instrumented Towers. IEEE Transactions on Power Delivery, 2004, 19, 1400-1409.	2.9	41
300	Effect of tall instrumented towers on the statistical distributions of lightning current parameters and its influence on the power system lightning performance assessment. European Transactions on Electrical Power, 2003, 13, 365-372.	1.0	7
301	Determination of reflection coefficients at the top and bottom of elevated strike objects struck by lightning. Journal of Geophysical Research, 2003, 108, .	3.3	40
302	On the use of data from distributed measurement systems for correlating voltage transients to lightning. , 2003, , .		2
303	Lightning performances of distribution lines: sensitivity to computational methods and to data. , 0, , .		15
304	On the enhancement of radiated electric and magnetic fields associated with lightning return strokes to tall structures. , 0, , .		6
305	Use of lightning location systems data in integrated systems for power quality monitoring. , 0, , .		6
306	A research on plants for in-situ vitrification of contaminated soils. , 0, , .		1

#	ARTICLE	IF	CITATIONS
307	Steam unit and gas turbine power station reliable control for network black-start-up. , 0, , .		5
308	Effects of line grounding electrodes modeling on the evaluation of lightning-induced overvoltages in overhead power distribution lines. , 0, , .		1
309	Measurement of lightning-induced currents in an experimental coaxial buried cable. , 0, , .		5
310	Influence of the height of an elevated strike object on the enhancement of lightning radiated fields. , 0, , .		2
311	Indirect-Lightning Performance of Distribution Lines: Influence of Protection Devices. , 0, , .		0