Alberto Borghetti

List of Publications by Year
in descending order

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146 papers	3,912 citations	172207 29 h-index	143772 57 g-index
150 all docs	150 docs citations	150 times ranked	2767 citing authors

#	Article	IF	Citations
1	Direct Lightning Performance of Distribution Lines With Shield Wire Considering LEMP Effect. IEEE Transactions on Power Delivery, 2022, 37, 76-84.	2.9	24
2	Intra-day scheduling of a local energy community coordinated with day-ahead multistage decisions. Sustainable Energy, Grids and Networks, 2022, 29, 100573.	2.3	12
3	Comparison between two Calculation Tools for the Appraisal of Lightning Induced Voltages. , 2022, , .		0
4	A New Transient-Based Earth Fault Protection System for Unearthed Meshed Distribution Networks. IEEE Transactions on Power Delivery, 2021, 36, 2585-2594.	2.9	9
5	A distribution network planning model considering neighborhood energy trading. Electric Power Systems Research, 2021, 191, 106894.	2.1	14
6	A New Calculation Method of the Lightning Electromagnetic Field Considering Variable Return Stroke Velocity. IEEE Transactions on Electromagnetic Compatibility, 2021, 63, 152-159.	1.4	3
7	Assessment of the Effects of the Electromagnetic Pulse on the Response of Overhead Distribution Lines to Direct Lightning Strikes. IEEE Open Access Journal of Power and Energy, 2021, 8, 522-531.	2.5	7
8	Basics of Power Systems Analysis. Springer Handbooks, 2021, , 273-366.	0.3	0
9	Procurement Cost Minimization of an Energy Community with Biogas, Photovoltaic and Storage Units. , 2021, , .		5
10	Day-ahead Multistage Stochastic Optimization of a Group of Electric Vehicle Charging Stations. , 2021, , .		1
11	Influence of the presence of grounded wires on the lightning performance of a medium-voltage line. Electric Power Systems Research, 2021, 196, 107206.	2.1	10
12	Performance analysis of a transient-based earth fault protection system for unearthed and compensated radial distribution networks. Electric Power Systems Research, 2021, 197, 107306.	2.1	3
13	Impact of neighborhood energy trading and renewable energy communities on the operation and planning of distribution networks. , 2021, , 125-174.		2
14	Influence of load dynamic response on the stability of microgrids during islanding transition. Electric Power Systems Research, 2021, 190, 106607.	2.1	18
15	Two-stage Scheduling of Electrical Vehicle Charging Station Clusters in a Community of DC Microgrids. , 2021, , .		5
16	Three-Phase State Estimation of a Low-Voltage Distribution Network with Kalman Filter. Energies, 2021, 14, 7421.	1.6	2
17	Influence of the Electromagnetic Pulse on the Overvoltages Due to Direct Lightning to Lines over Soils with Different Ground Conductivity. , 2021, , .		1
18	Day-Ahead Scheduling of a Local Energy Community: An Alternating Direction Method of Multipliers Approach. IEEE Transactions on Power Systems, 2020, 35, 1132-1142.	4.6	87

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19	Lightning protection of a multi-circuit HV-MV overhead line. Electric Power Systems Research, 2020, 180, 106119.	2.1	8
20	Power Loss Reduction in the Energy Resource Scheduling of a Local Energy Community. , 2020, , .		4
21	Multistage day-ahead scheduling of the distributed energy sources in a local energy community. , 2020, , .		5
22	Estimation of the expected annual number of flashovers in power distribution lines due to negative and positive lightning. Electric Power Systems Research, 2019, 176, 105956.	2.1	8
23	Inverse Laplace Transform of Sundeâ€™s Formula for the Ground Impedance of Buried Cables. , 2019, , .		0
24	An ADMM Approach for Day-Ahead Scheduling of a Local Energy Community. , 2019, , .		8
25	Statistical Characterization of Lightning Induced Overvoltage Waveforms in Overhead Lines. , 2019, , .		1
26	Influence of the Radial Electric Field Appraisal on Lightning-Induced Overvoltages Statistical Assessment. IEEE Transactions on Electromagnetic Compatibility, 2019, 61, 637-643.	1.4	4
27	Characterization of Congestion in Distribution Network Considering High Penetration of PV Generation and EVs. , 2019, , .		2
28	Lightning Performance Assessment of Power Distribution Lines by Means of Stratified Sampling Monte Carlo Method. IEEE Transactions on Power Delivery, 2018, 33, 2571-2577.	2.9	29
29	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
30	Inverse Laplace Transform of the Ground Impedance Matrix of Overhead Lines. IEEE Transactions on Electromagnetic Compatibility, 2018, 60, 2033-2036.	1.4	10
31	The Need of Multidisciplinary Approaches and Engineering Tools for the Development and Implementation of the Smart City Paradigm. Proceedings of the IEEE, 2018, 106, 738-760.	16.4	42
32	Lightning Performance of Overhead Power Distribution Lines in Urban Areas. IEEE Transactions on Power Delivery, 2018, 33, 581-588.	2.9	28
33	Comparison Between Multistage Stochastic Optimization Programming and Monte Carlo Simulations for the Operation of Local Energy Systems. , 2018, , .		7
34	Performance Analysis of a Communication-Supported Earth Fault Protection System of Medium Voltage Loop and Meshed Networks. , 2018, , .		1
35	Lightning Protection of a Compact MV Power Line Sharing the same Poles of a HV Line. , 2018, , .		4
36	Statistical Assessment of Lightning-Induced Overvoltages in Low Voltage Lines. , 2018, , .		0

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37	Influence of the Return Stroke Current Waveform on the Lightning Performance of Distribution Lines. IEEE Transactions on Power Delivery, 2017, 32, 1800-1808.	2.9	44
38	Response of distribution networks to direct and indirect lightning: Influence of surge arresters location, flashover occurrence and environmental shielding. Electric Power Systems Research, 2017, 153, 73-81.	2.1	23
39	Calculation of lightning-induced overvoltages on urban overhead lines above a lossy ground plane â€" appraisal of the shielding effect of nearby buildings. , 2017, , .		2
40	Lightning performance of distribution lines due to positive and negative indirect lightning flashes. , 2017, , .		3
41	Robust Optimization for Virtual Power Plants. Lecture Notes in Computer Science, 2017, , 17-30.	1.0	7
42	New Integral Formulas for the Elements of the Transient Ground Resistance Matrix of Multiconductor Lines. IEEE Transactions on Electromagnetic Compatibility, 2017, 59, 193-198.	1.4	4
43	Synchrophasors-Based Distributed Secondary Voltage/VAR Control via Cellular Network. IEEE Transactions on Smart Grid, 2017, 8, 262-274.	6.2	33
44	Mixed integer programming model for the operation of an experimental low-voltage network. , 2017, , .		3
45	Scenario tree generation for the optimization model of a parking lot for electric vehicles. , 2017, , .		4
46	Plenary speaker. , 2017, , .		0
47	9 Application system design: Complex systems management and automation. , 2017, , 281-316.		2
48	Integration of distributed energy resources in distribution power systems. , 2016, , 15-50.		6
49	Lightning induced overvoltages on overhead lines shielded by nearby buildings. , 2016, , .		4
50	A co-simulation platform for the analysis of the impact of electromobility scenarios on the urban distribution network. , 2016, , .		4
51	Optimal operation of vehicle-to-grid and grid-to-vehicle systems integrated with renewables. , 2016, , .		6
52	Two-stage network processor for an independent HVDC grid supervisory control. , 2016, , .		0
53	Lightning performance of a real distribution network with focus on transformer protection. Electric Power Systems Research, 2016, 139, 60-67.	2.1	10
54	Impact of Interdisciplinary Research on Planning, Running, and Managing Electromobility as a Smart Grid Extension. IEEE Access, 2015, 3, 2281-2305.	2.6	22

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55	Advancements in insulation coordination for improving lightning performance of distribution lines. , 2015, , .		7
56	Integration of traffic and grid simulator for the analysis of e-mobility impact on power distribution networks. , 2015, , .		7
57	Volt/var optimization of unbalanced distribution feeders via mixed integer linear programming. International Journal of Electrical Power and Energy Systems, 2015, 72, 40-47.	3.3	27
58	Reactive power control of photovoltaic units over wireless cellular networks. , 2015, , .		2
59	Estimation of the influence of direct strokes on the lightning performance of overhead distribution lines. , 2015, , .		13
60	Optimal Scheduling of a Multiunit Hydro Power Station in a Short-Term Planning Horizon. Profiles in Operations Research, 2015, , 167-181.	0.3	1
61	Selection of MV/LV transformers to be protected by surge arresters against indirect lightning overvoltages. , 2014, , .		4
62	Volt/var optimization of unbalanced distribution feeders via Mixed Integer Linear Programming. , 2014, , .		7
63	Indirect lightning performance of a real distribution network with focus on transformer protection. , 2014, , .		8
64	Protection against lightning overvoltages in resonant grounded power distribution networks. Electric Power Systems Research, 2014, 113, 121-128.	2.1	13
65	ICT-power co-simulation platform for the analysis of communication-based volt/var optimization in distribution feeders. , 2014, , .		16
66	Simulation of the Volt/Var Control in Distribution Feeders by Means of a Networked Multiagent System. IEEE Transactions on Industrial Informatics, 2014, 10, 2340-2353.	7.2	33
67	Assessment of lightning impact frequency for process equipment. Reliability Engineering and System Safety, 2014, 130, 95-105.	5.1	29
68	CIGRE technical brochure on lightning parameters for engineering applications. , 2013, , .		30
69	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
70	Effects of nearby buildings on lightning induced voltages on overhead power distribution lines. Electric Power Systems Research, 2013, 94, 38-45.	2.1	20
71	Using mixed integer programming for the volt/var optimization in distribution feeders. Electric Power Systems Research, 2013, 98, 39-50.	2.1	81
72	A model for process equipment damage probability assessment due to lightning. Reliability Engineering and System Safety, 2013, 115, 91-99.	5.1	58

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73	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
74	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
75	SITL and HLA co-simulation platforms: Tools for analysis of the integrated ICT and electric power system. , 2013, , .		23
76	A procedure to evaluate the risk of failure of distribution transformers insulation due to lightning induced voltages. , 2013, , .		9
77	Assessment of the Lightning Performance of Compact Overhead Distribution Lines. IEEJ Transactions on Power and Energy, 2013, 133, 987-993.	0.1	17
78	On the FEM and TL approaches for the calculation of lightning - induced voltages on overhead lines. , 2012, , .		0
79	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
80	State estimation of Active Distribution Networks: Comparison between WLS and iterated kalman-filter algorithm integrating PMUs. , 2012, , .		60
81	Protection systems against lightning-originated overvoltages in resonant grounded power distribution systems. , 2012, , .		7
82	A Mixed-Integer Linear Programming Approach for the Computation of the Minimum-Losses Radial Configuration of Electrical Distribution Networks. IEEE Transactions on Power Systems, 2012, 27, 1264-1273.	4.6	89
83	Power system islands, autonomous microgrids and relevant instrumentation. , 2012, , .		3
84	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
85	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
86	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
87	Synchronized Phasors Monitoring During the Islanding Maneuver of an Active Distribution Network. IEEE Transactions on Smart Grid, 2011, 2, 82-91.	6.2	204
88	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
89	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
90	Calculation of lightning-induced voltages on an overhead line taking into account the presence of nearby buildings. , 2011, , .		4

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91	Use of the full-wave finite element method for the numerical electromagnetic analysis of LEMP and its coupling with overhead lines. , 2011, , .		8
92	Interaction between grounding systems and nearby lightning for the calculation of overvoltages in overhead distribution lines. , 2011, , .		7
93	Numerical solution of the Leader Progression Model by means of the Finite Element Method. , 2010, , .		8
94	Voltage transient measurements in a distribution network and sequence of relay events associated to lightning strokes detected by LLS. , 2010, , .		2
95	Monte Carlo based lightning risk assessment in oil plant tank farms. , 2010, , .		11
96	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
97	Synchronized phasors monitoring during the islanding maneuver of an active distribution network. , 2010, , .		10
98	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
99	Short-term scheduling of active distribution systems. , 2009, , .		15
100	Influence of feasibility constrains on the bidding strategy selection in a day-ahead electricity market session. Electric Power Systems Research, 2009, 79, 1727-1737.	2.1	12
101	Lightning-Induced Overvoltages Transferred Through Distribution Power Transformers. IEEE Transactions on Power Delivery, 2009, 24, 360-372.	2.9	93
102	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
103	Indirect-Lightning Performance of Overhead Distribution Networks With Complex Topology. IEEE Transactions on Power Delivery, 2009, 24, 2206-2213.	2.9	45
104	Development of an RTU for synchrophasors estimation in active distribution networks. , 2009, , .		9
105	A microcontroller-based automatic scheduling system for residential microgrids. , 2009, , .		13
106	A procedure for the automatic scheduling of distributed energy resources in medium voltage networks. , 2009, , .		5
107	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
108	An MILP Approach for Short-Term Hydro Scheduling and Unit Commitment With Head-Dependent Reservoir. IEEE Transactions on Power Systems, 2008, 23, 1115-1124.	4.6	271

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109	Analysis of black-startup and islanding capabilities of a combined cycle power plant. , 2008, , .		4
110	DSP-Controlled Test Set-up for the Performance Assessment of an Autonomous Power Unit Equipped with a PEM Fuel Cell. , 2007, , .		6
111	Optimal Operating Point Calculation for Medium Voltage Distribution Systems. , 2007, , .		3
112	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
113	Models of Wind-Turbine Main Shaft Bearings for the Development of Specific Lightning Protection Systems. , 2007, , .		17
114	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
115	A Two-Stage Scheduler of Distributed Energy Resources. , 2007, , .		14
116	Lightning-Correlated Faults in Power Distribution Networks. , 2007, , .		5
117	An Energy Resource Scheduler Implemented in the Automatic Management System of a Microgrid Test Facility. , 2007, , .		18
118	An optimization problem in the electricity market. 4or, 2007, 5, 247-259.	1.0	0
119	A Statistical Approach for Estimating the Correlation between Lightning and Faults in Power Distribution Systems. , 2006, , .		12
120	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
121	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
122	Bidding strategy selection in a day-ahead electricity auction system. , 2005, , .		1
123	Lightning-induced overvoltages transferred from medium-voltage to low-voltage networks. , 2005, , .		9
124	Lightning-induced voltages on complex distribution systems: models, advanced software tools and experimental validation. Journal of Electrostatics, 2004, 60, 163-174.	1.0	92
125	Power system dynamics during large power imbalance phenomena: role of the thermoelectric units. , 2004, , .		1
126	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

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127	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
128	Correction to "Lagrangian heuristics based on disaggregated bundle methods for hydrothermal unit commitment". IEEE Transactions on Power Systems, 2003, 18, 974-974.	4.6	1
129	Lagrangian heuristics based on disaggregated bundle methods for hydrothermal unit commitment. IEEE Transactions on Power Systems, 2003, 18, 313-323.	4.6	119
130	Auctions with Explicit Demand-Side Bidding in Competitive Electricity Markets. , 2002, , 53-74.		11
131	Black-start-up simulation of a repowered thermoelectric unit. Control Engineering Practice, 2001, 9, 791-803.	3.2	13
132	Black-Startup Simulation of a Repowered Thermoelectric Unit. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2000, 33, 73-80.	0.4	0
133	Generic dynamic load models in long-term voltage stability studies. International Journal of Electrical Power and Energy Systems, 2000, 22, 291-301.	3.3	15
134	Simulation of the Load Following Capability of a Repowered Plant During the First Phase of the System Restoration. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1999, 32, 7231-7240.	0.4	5
135	On dynamic load models for voltage stability studies. IEEE Transactions on Power Systems, 1997, 12, 293-303.	4.6	75
136	Tests on self-healing metallized polypropylene capacitors for power applications. IEEE Transactions on Power Delivery, 1995, 10, 556-561.	2.9	20
137	Lego modelling of the power station electrical auxiliaries for a real-time training simulator. , 0, , .		0
138	Power distribution practices in USA and Europe: impact on power quality. , 0, , .		22
139	Lightning performances of distribution lines: sensitivity to computational methods and to data. , 0, , .		15
140	Lagrangian relaxation and Tabu Search approaches for the unit commitment problem. , 0, , .		27
141	Steam unit and gas turbine power station reliable control for network black-start-up. , 0, , .		5
142	Effects of line grounding electrodes modeling on the evaluation of lightning-induced overvoltages in overhead power distribution lines. , 0, , .		1
143	Using of a cost-based unit commitment algorithm to assist bidding strategy decisions. , 0, , .		8
144	Lagrangian heuristics based on disaggregated Bundle for hydrothermal unit commitment. , 0, , .		3

#	Article	IF	Citations
145	Dispersed generators interfaced with distribution systems: Dynamic response to faults and perturbations. , 0, , .		10
146	Indirect-Lightning Performance of Distribution Lines: Influence of Protection Devices. , 0, , .		0