Rabih A Jabr

List of Publications by Year
in descending order

131 papers	6,436 citations	93792 39 h-index	75989 78 g-index
132 all docs	132 docs citations	132 times ranked	4802 citing authors

#	ARTICLE	IF	CITATIONS
1	Affinely Adjustable Robust Volt/VAr Control Without Centralized Computations. IEEE Transactions on Power Systems, 2023, 38, 656-667.	4.6	11
2	Penalty-Based Volt/VAr Optimization in Complex Coordinates. IEEE Transactions on Power Systems, 2022, 37, 2432-2440.	4.6	5
3	Estimation of distribution transformer kVA load using residential smart meter data. Electric Power Systems Research, 2022, 204, 107663.	2.1	9
4	Global Optimality of Inverter Dynamic Voltage Support. IEEE Transactions on Power Systems, 2022, 37, 3947-3957.	4.6	4
5	Economic Operation of Droop-Controlled AC Microgrids. IEEE Transactions on Power Systems, 2022, 37, 3119-3128.	4.6	8
6	Fast multi-phase gain matrix computation for real time distribution system state estimation. International Journal of Electrical Power and Energy Systems, 2022, 138, 107866.	3.3	1
7	On the Optimality of Voltage Unbalance Attenuation by Inverters. IEEE Transactions on Sustainable Energy, 2022, 13, 1492-1506.	5.9	2
8	A CNN-Sequence-to-Sequence network with attention for residential short-term load forecasting. Electric Power Systems Research, 2022, 211, 108152.	2.1	15
9	Segregated Linear Decision Rules for Inverter Watt-VAr Control. IEEE Transactions on Power Systems, 2021, 36, 2702-2708.	4.6	7
10	Approximate Load Models for Conic OPF Solvers. IEEE Transactions on Power Systems, 2021, 36, 549-552.	4.6	15
11	Mixed-Integer Convex Optimization for DC Microgrid Droop Control. IEEE Transactions on Power Systems, 2021, 36, 5901-5908.	4.6	14
12	Power Flow Based Volt/var Optimization Under Uncertainty. Journal of Modern Power Systems and Clean Energy, 2021, 9, 1000-1006.	3.3	3
13	A Complex Variable Perturbed Gauss-Newton Method for Tracking Mode State Estimation. IEEE Transactions on Power Systems, 2021, 36, 2594-2602.	4.6	10
14	Approximate Load Models for Conic OPF Solvers. , 2021, , .		0
15	Real-time equality-constrained hybrid state estimation in complex variables. International Journal of Electrical Power and Energy Systems, 2020, 117, 105634.	3.3	3
16	Optimization of building form to reduce incident solar radiation. Journal of Building Engineering, 2020, 28, 101025.	1.6	13
17	Robust Ensemble Kalman Filter for Medium-Voltage Distribution System State Estimation. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 4114-4124.	2.4	25
18	Integrating building shape optimization into the architectural design process. Architectural Science Review, 2020, 63, 63-73.	1.1	9

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19	Complex Variable Multi-phase Distribution System State Estimation Using Vectorized Code. Journal of Modern Power Systems and Clean Energy, 2020, 8, 679-688.	3.3	9
20	Securing Smart Grid Communication using Ethereum Smart Contracts. , 2020, , .		5
21	Distributed Solution of Stochastic Volt/VAr Control in Radial Networks. IEEE Transactions on Smart Grid, 2020, 11, 5314-5324.	6.2	25
22	Distributionally Robust CVaR Constraints for Power Flow Optimization. IEEE Transactions on Power Systems, 2020, 35, 3764-3773.	4.6	38
23	Kungâ€™s component extraction in power system fault location. International Journal of Electrical Power and Energy Systems, 2020, 119, 105888.	3.3	5
24	Locating ground faults in non-solidly grounded networks via nonlinear least-squares. International Journal of Electrical Power and Energy Systems, 2020, 121, 106038.	3.3	5
25	A Two-Stage Chance Constrained Volt/Var Control Scheme for Active Distribution Networks With Nodal Power Uncertainties. IEEE Transactions on Power Systems, 2019, 34, 314-325.	4.6	77
26	High-Order Approximate Power Flow Solutions and Circular Arithmetic Applications. IEEE Transactions on Power Systems, 2019, 34, 5053-5062.	4.6	8
27	A Current Injection Approach for Minimum Loss Solution. Electric Power Components and Systems, 2019, 47, 1040-1045.	1.0	0
28	A Two-Stage Chance Constrained Volt/Var Control Scheme for Active Distribution Networks with Nodal Power Uncertainties. , 2019, , .		0
29	Robust Volt/VAr Control With Photovoltaics. IEEE Transactions on Power Systems, 2019, 34, 2401-2408.	4.6	94
30	Power transmission network expansion planning: A semidefinite programming branch-and-bound approach. European Journal of Operational Research, 2019, 274, 837-844.	3.5	33
31	High Performance Distribution Network Power Flow Using Wirtinger Calculus. IEEE Transactions on Smart Grid, 2019, 10, 3311-3319.	6.2	17
32	Hybrid State Estimation in Complex Variables. IEEE Transactions on Power Systems, 2018, 33, 5288-5296.	4.6	35
33	Compensation in Complex Variables for Microgrid Power Flow. IEEE Transactions on Power Systems, 2018, 33, 3207-3209.	4.6	17
34	Tracking Transformer Tap Position in Real-Time Distribution Network Power Flow Applications. IEEE Transactions on Smart Grid, 2018, 9, 2442-2452.	6.2	17
35	Fault Location in Distribution Networks Through Graph Marking. IEEE Transactions on Smart Grid, 2018, 9, 1345-1353.	6.2	55
36	Solution of DC Railway Traction Power Flow Systems Including Limited Network Receptivity. IEEE Transactions on Power Systems, 2018, 33, 962-969.	4.6	45

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37	Real Time Optimal Reconfiguration of Multiphase Active Distribution Networks. IEEE Transactions on Smart Grid, 2018, 9, 6829-6839.	6.2	40
38	Linear Decision Rules for Control of Reactive Power by Distributed Photovoltaic Generators. IEEE Transactions on Power Systems, 2018, 33, 2165-2174.	4.6	91
39	Mixed-Integer Optimization for Volt/VAr Control in Radial Networks. , 2018, , .		2
40	Affinely Adjustable Robust Counterpart Approach for Local Dispatching of the Inverter's Reactive Power. , 2018, , .		1
41	A Capacity Mechanism Design for Distribution Network Expansion Planning. , 2018, , .		0
42	Real Time Multiphase State Estimation in Weakly Meshed Distribution Networks With Distributed Generation. IEEE Transactions on Power Systems, 2017, 32, 4560-4569.	4.6	32
43	Robust Detection of Cyber Attacks on State Estimators Using Phasor Measurements. IEEE Transactions on Power Systems, 2017, 32, 2468-2470.	4.6	36
44	Uncertainty and Risk in Generation Scheduling. , 2017, , 27-52.		2
45	A compensation technique for unsymmetrical three-phase power flow. , 2016, , .		1
46	Multi-Phase State Estimation Featuring Industrial-Grade Distribution Network Models. IEEE Transactions on Smart Grid, 2016, , 1-1.	6.2	29
47	Neural network technique for hybrid electric vehicle optimization. , 2016, , .		4
48	Sensitivity-Based Discrete Coordinate-Descent for Volt/VAr Control in Distribution Networks. IEEE Transactions on Power Systems, 2016, 31, 4670-4678.	4.6	61
49	A Compensation-Based Conic OPF for Weakly Meshed Networks. IEEE Transactions on Power Systems, 2016, 31, 4167-4168.	4.6	26
50	Optimal Energy Management of Hybrid Fuel Cell Electric Vehicles. , 2015, , .		10
51	Dynamic programming technique for optimizing fuel cell hybrid vehicles. International Journal of Hydrogen Energy, 2015, 40, 7777-7790.	3.8	128
52	Robust Optimization of Storage Investment on Transmission Networks. IEEE Transactions on Power Systems, 2015, 30, 531-539.	4.6	98
53	Stochastic Distribution System Operation Considering Voltage Regulation Risks in the Presence of PV Generation. IEEE Transactions on Sustainable Energy, 2015, 6, 1315-1324.	5.9	63
54	A Fortescue Approach for Real-Time Short Circuit Computation in Multiphase Distribution Networks. IEEE Transactions on Power Systems, 2015, 30, 3276-3285.	4.6	34

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55	Transformer Modeling for Three-Phase Distribution Network Analysis. IEEE Transactions on Power Systems, 2015, 30, 2604-2611.	4.6	44
56	Robust Multi-Period OPF With Storage and Renewables. IEEE Transactions on Power Systems, 2015, 30, 2790-2799.	4.6	140
57	Influence of distribution line asymmetry on power flow results. , 2014, , .		0
58	Experience in distribution state estimation preparation and operation in complex radial distribution networks. , 2014, , .		5
59	Minimum loss operation of distribution networks with photovoltaic generation. IET Renewable Power Generation, 2014, 8, 33-44.	1.7	69
60	Distribution Voltage Control Considering the Impact of PV Generation on Tap Changers and Autonomous Regulators. IEEE Transactions on Power Systems, 2014, 29, 182-192.	4.6	232
61	Optimized energy management system for fuel cell hybrid vehicles. , 2014, , .		8
62	Optimal power allocation for a FCHV based on linear programming and PID controller. International Journal of Hydrogen Energy, 2014, 39, 21724-21738.	3.8	29
63	A novel approach for maximum power point tracking of a PV generator with partial shading. , 2014, , .		3
64	A Sensitivity Approach to Model Local Voltage Controllers in Distribution Networks. IEEE Transactions on Power Systems, 2014, 29, 1419-1428.	4.6	79
65	Robust Transmission Network Expansion Planning With Uncertain Renewable Generation and Loads. IEEE Transactions on Power Systems, 2013, 28, 4558-4567.	4.6	247
66	Real Time Estimation of Loads in Radial and Unsymmetrical Three-Phase Distribution Networks. IEEE Transactions on Power Systems, 2013, 28, 4839-4848.	4.6	73
67	Adjustable Robust OPF With Renewable Energy Sources. IEEE Transactions on Power Systems, 2013, 28, 4742-4751.	4.6	297
68	Rank-constrained semidefinite program for unit commitment. International Journal of Electrical Power and Energy Systems, 2013, 47, 13-20.	3.3	23
69	Optimization of AC Transmission System Planning. IEEE Transactions on Power Systems, 2013, 28, 2779-2787.	4.6	78
70	Polyhedral Formulations and Loop Elimination Constraints for Distribution Network Expansion Planning. IEEE Transactions on Power Systems, 2013, 28, 1888-1897.	4.6	56
71	Mixed-integer Quadratic Programming Based Rounding Technique for Power System State Estimation with Discrete and Continuous Variables. Electric Power Components and Systems, 2013, 41, 555-567.	1.0	8
72	Exploiting Sparsity in SDP Relaxations of the OPF Problem. IEEE Transactions on Power Systems, 2012, 27, 1138-1139.	4.6	120

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73	Solution to Economic Dispatching With Disjoint Feasible Regions Via Semidefinite Programming. IEEE Transactions on Power Systems, 2012, 27, 572-573.	4.6	33
74	Robust and low-order design of flexible AC transmission systems and power system stabilisers for oscillation damping. IET Generation, Transmission and Distribution, 2012, 6, 445-452.	1.4	33
75	Minimum Loss Network Reconfiguration Using Mixed-Integer Convex Programming. IEEE Transactions on Power Systems, 2012, 27, 1106-1115.	4.6	453
76	An asymmetrical and quadratic Support Vector Regression loss function for Beirut short term load forecast. , 2012, , .		5
77	Contingency Constrained VAr Planning Using Penalty Successive Conic Programming. IEEE Transactions on Power Systems, 2012, 27, 545-553.	4.6	35
78	Tight polyhedral approximation for mixed-integer linear programming unit commitment formulations. IET Generation, Transmission and Distribution, 2012, 6, 1104-1111.	1.4	43
79	Mixed integer conic programming approach for optimal capacitor placement in radial distribution networks. , 2012, , .		1
80	Maximum power point tracking using ripple correlation and incremental conductance. , 2012, , .		5
81	Participation factor approach for phasor measurement unit placement in power system state estimation. IET Generation, Transmission and Distribution, 2012, 6, 922.	1.4	27
82	Ordinal optimization for optimal Capacitor Placement and network reconfiguration in radial distribution networks. , 2012, , .		4
83	Application of semidefinite programming relaxation and selective pruning to the unit commitment problem. Electric Power Systems Research, 2012, 90, 85-92.	2.1	19
84	Optimization of Reactive Power Expansion Planning. Electric Power Components and Systems, 2011, 39, 1285-1301.	1.0	9
85	Meter Placement for Distribution System State Estimation: An Ordinal Optimization Approach. IEEE Transactions on Power Systems, 2011, 26, 2328-2335.	4.6	106
86	Ordinal Optimization for Dynamic Network Reconfiguration. Electric Power Components and Systems, 2011, 39, 1845-1857.	1.0	8
87	Statistical Representation of Distribution System Loads Using Gaussian Mixture Model. IEEE Transactions on Power Systems, 2010, 25, 29-37.	4.6	271
88	A Sequential Conic Programming Approach for the Coordinated and Robust Design of Power System Stabilizers. IEEE Transactions on Power Systems, 2010, 25, 1627-1637.	4.6	78
89	Generation self-scheduling with partial information on the probability distribution of prices. IET Generation, Transmission and Distribution, 2010, 4, 138.	1.4	11
90	Distribution system state estimation through Gaussian mixture model of the load as pseudo-measurement. IET Generation, Transmission and Distribution, 2010, 4, 50.	1.4	156

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91	Robust and coordinated tuning of power system stabiliser gains using sequential linear programming. IET Generation, Transmission and Distribution, 2010, 4, 893.	1.4	63
92	Recent Developments in Optimal Power Flow Modeling Techniques. Energy Systems, 2010, , 3-29.	0.5	3
93	Computing closest saddle node bifurcations in a radial system via conic programming. International Journal of Electrical Power and Energy Systems, 2009, 31, 243-248.	3.3	10
94	Worst-Case Robust Profit in Generation Self-Scheduling. IEEE Transactions on Power Systems, 2009, 24, 492-493.	4.6	12
95	Intermittent wind generation in optimal power flow dispatching. IET Generation, Transmission and Distribution, 2009, 3, 66-74.	1.4	178
96	Choice of estimator for distribution system state estimation. IET Generation, Transmission and Distribution, 2009, 3, 666-678.	1.4	202
97	Ordinal optimisation approach for locating and sizing of distributed generation. IET Generation, Transmission and Distribution, 2009, 3, 713-723.	1.4	139
98	Optimal placement of capacitors in a radial network using conic and mixed integer linear programming. Electric Power Systems Research, 2008, 78, 941-948.	2.1	49
99	Optimal Power Flow Using an Extended Conic Quadratic Formulation. IEEE Transactions on Power Systems, 2008, 23, 1000-1008.	4.6	140
100	AC network state estimation using linear measurement functions. IET Generation, Transmission and Distribution, 2008, 2, 1.	1.4	19
101	Distribution System Load Flow Using Primal Dual Interior Point Method. , 2008, , .		3
102	Vehicle Black Box System. , 2008, , .		30
103	Inductor design using signomial programming. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2007, 26, 461-475.	0.5	6
104	Self-scheduling under ellipsoidal price uncertainty: conic-optimisation approach. IET Generation, Transmission and Distribution, 2007, 1, 23.	1.4	15
105	Conic programming approach for static voltage stability analysis in radial networks. IET Generation, Transmission and Distribution, 2007, 1, 203.	1.4	16
106	A Conic Quadratic Format for the Load Flow Equations of Meshed Networks. IEEE Transactions on Power Systems, 2007, 22, 2285-2286.	4.6	89
107	Newton-Raphson Solution of Poisson's Equation in a Pn Diode. International Journal of Electrical Engineering and Education, 2007, 44, 23-33.	0.4	14
108	Teaching microprocessors, microcontrollers, and digital signal processing courses using only one target processor: The newborn dsPIC30Fâ„¢ from Microchipâ„¢. Computer Applications in Engineering Education, 2007, 15, 185-191.	2.2	7

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109	A PIC-Based Microcontroller Design Laboratory. , 2006, , .		3
110	Radial Distribution Load Flow Using Conic Programming. IEEE Transactions on Power Systems, 2006, 21, 1458-1459.	4.6	497
111	Power system state estimation using an iteratively reweighted least squares method for sequential L1-regression. International Journal of Electrical Power and Energy Systems, 2006, 28, 86-92.	3.3	14
112	Solution trajectories of the harmonic-elimination problem. IET Electric Power Applications, 2006, 153, 97.	1.4	28
113	Teaching Power Electronics with the Aid of Spreadsheets. International Journal of Electrical Engineering and Education, 2006, 43, 15-33.	0.4	2
114	Power system Huber M-estimation with equality and inequality constraints. Electric Power Systems Research, 2005, 74, 239-246.	2.1	23
115	Primal-dual interior-point approach to compute the L1 solution of the state estimation problem. IET Generation, Transmission and Distribution, 2005, 152, 313.	1.1	11
116	Application of geometric programming to transformer design. IEEE Transactions on Magnetics, 2005, 41, 4261-4269.	1.2	89
117	Robust Self-Scheduling Under Price Uncertainty Using Conditional Value-at-Risk. IEEE Transactions on Power Systems, 2005, 20, 1852-1858.	4.6	140
118	Modeling Network Losses Using Quadratic Cones. IEEE Transactions on Power Systems, 2005, 20, 505-506.	4.6	17
119	Iteratively reweighted least-squares implementation of the WLAV state-estimation method. IET Generation, Transmission and Distribution, 2004, 151, 103.	1.1	38
120	Exploiting special structure in interior-point algorithms for power generation dispatching. International Journal of Electrical Power and Energy Systems, 2004, 26, 65-71.	3.3	2
121	A Primal-Dual Interior-Point Method to Solve the Optimal Power Flow Dispatching Problem. Optimization and Engineering, 2003, 4, 309-336.	1.3	34
122	Iteratively re-weighted least absolute value method for state estimation. IET Generation, Transmission and Distribution, 2003, 150, 385.	1.1	14
123	A primal-dual interior point method for optimal power flow dispatching. IEEE Transactions on Power Systems, 2002, 17, 654-662.	4.6	109
124	A Primal-Dual Interior Point Method for Optimal Power Flow Dispatching. IEEE Power Engineering Review, 2002, 22, 55-55.	0.1	6
125	Homogeneous cutting-plane method to solve the security-constrained economic dispatching problem. IET Generation, Transmission and Distribution, 2002, 149, 139.	1.1	13
126	A PC based state estimator interfaced with a remote terminal unit placement algorithm. IEEE Transactions on Power Systems, 2001, 16, 210-215.	4.6	22

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127	Homogeneous interior point method for constrained power scheduling. IET Generation, Transmission and Distribution, 2000, 147, 239.	1.1	14
128	A study of the homogeneous algorithm for dynamic economic dispatch with network constraints and transmission losses. IEEE Transactions on Power Systems, 2000, 15, 605-611.	4.6	26
129	A homogeneous linear programming algorithm for the security constrained economic dispatch problem. IEEE Transactions on Power Systems, 2000, 15, 930-936.	4.6	220
130	Fuel Cell Hybrid Electric Vehicle Sizing using Ordinal Optimization. SAE International Journal of Passenger Cars - Electronic and Electrical Systems, 0, 8, 60-69.	0.3	9
131	Near Optimal Control of Fuel Cell Hybrid Electric Vehicles in Real-Time. , 0, , .		5