Russell W Bent

List of Publications by Year in descending order

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69 papers

2,483 citations

257357 24 h-index 243529 44 g-index

73 all docs

73 docs citations

73 times ranked 2285 citing authors

#	Article	IF	CITATIONS
1	Scenario-Based Planning for Partially Dynamic Vehicle Routing with Stochastic Customers. Operations Research, 2004, 52, 977-987.	1.2	359
2	A Two-Stage Hybrid Local Search for the Vehicle Routing Problem with Time Windows. Transportation Science, 2004, 38, 515-530.	2.6	250
3	A two-stage hybrid algorithm for pickup and delivery vehicle routing problems with time windows. Computers and Operations Research, 2006, 33, 875-893.	2.4	205
4	Convex Relaxations for Gas Expansion Planning. INFORMS Journal on Computing, 2016, 28, 645-656.	1.0	104
5	Battle of the Water Networks II. Journal of Water Resources Planning and Management - ASCE, 2014, 140, .	1.3	92
6	PowerModels. JL: An Open-Source Framework for Exploring Power Flow Formulations. , 2018, , .		92
7	Security-Constrained Design of Isolated Multi-Energy Microgrids. IEEE Transactions on Power Systems, 2018, 33, 2452-2462.	4.6	80
8	Managing operations of plug-in hybrid electric vehicle (PHEV) exchange stations for use with a smart grid. Energy Policy, 2014, 67, 364-377.	4.2	72
9	Cyber-Physical Security: A Game Theory Model of Humans Interacting Over Control Systems. IEEE Transactions on Smart Grid, 2013, 4, 2320-2327.	6.2	60
10	Optimal Compression in Natural Gas Networks: A Geometric Programming Approach. IEEE Transactions on Control of Network Systems, 2015, 2, 47-56.	2.4	59
11	Locating PHEV Exchange Stations in V2G. , 2010, , .		49
12	Resilient design of large-scale distribution feeders with networked microgrids. Electric Power Systems Research, 2019, 171, 150-157.	2.1	49
13	Chance-Constrained Unit Commitment With N-1 Security and Wind Uncertainty. IEEE Transactions on Control of Network Systems, 2019, 6, 1062-1074.	2.4	46
14	Approximating line losses and apparent power in AC power flow linearizations. , 2012, , .		45
15	Joint Electricity and Natural Gas Transmission Planning With Endogenous Market Feedbacks. IEEE Transactions on Power Systems, 2018, 33, 6397-6409.	4.6	42
16	Transmission Network Expansion Planning With Complex Power Flow Models. IEEE Transactions on Power Systems, 2012, 27, 904-912.	4.6	41
17	An adaptive, multivariate partitioning algorithm for global optimization of nonconvex programs. Journal of Global Optimization, 2019, 74, 639-675.	1.1	40
18	Tightening McCormick Relaxations for Nonlinear Programs via Dynamic Multivariate Partitioning. Lecture Notes in Computer Science, 2016, , 369-387.	1.0	40

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19	Resilient Off-Grid Microgrids: Capacity Planning and N-1 Security. IEEE Transactions on Smart Grid, 2018, 9, 6511-6521.	6.2	39
20	Strategic Planning for Disaster Recovery with Stochastic Last Mile Distribution. Lecture Notes in Computer Science, 2010, , 318-333.	1.0	37
21	Convex Optimization for Joint Expansion Planning of Natural Gas and Power Systems. , 2016, , .		37
22	Polyhedral approximation in mixed-integer convex optimization. Mathematical Programming, 2018, 172, 139-168.	1.6	34
23	A simple and deterministic competitive algorithm for online facility location. Information and Computation, 2004, 194, 175-202.	0.5	33
24	Online stochastic optimization under time constraints. Annals of Operations Research, 2010, 177, 151-183.	2.6	33
25	Optimal Resilient transmission Grid Design. , 2016, , .		33
26	Optimal Transmission Line Switching Under Geomagnetic Disturbances. IEEE Transactions on Power Systems, 2018, 33, 2539-2550.	4.6	31
27	Strategic stockpiling of power system supplies for disaster recovery. , 2011, , .		28
28	Line Outage Localization Using Phasor Measurement Data in Transient State. IEEE Transactions on Power Systems, 2016, 31, 3019-3027.	4.6	28
29	Extended Formulations in Mixed-Integer Convex Programming. Lecture Notes in Computer Science, 2016, , 102-113.	1.0	26
30	Computationally efficient optimal Transmission Switching: Solution space reduction., 2012,,.		25
31	Phasor measurement unit selection for unobservable electric power data integrity attack detection. International Journal of Critical Infrastructure Protection, 2014, 7, 155-164.	2.9	25
32	Dynamic Compressor Optimization in Natural Gas Pipeline Systems. INFORMS Journal on Computing, 2019, 31, 40-65.	1.0	23
33	Probabilistic <i>N</i> â€ <i>k</i> failureâ€identification for power systems. Networks, 2018, 71, 302-321.	1.6	22
34	Tight Piecewise Convex Relaxations for Global Optimization of Optimal Power Flow. , 2018, , .		22
35	Transmission Network Expansion Planning: Bridging the gap between AC heuristics and DC approximations. , 2014, , .		21
36	Pressure Fluctuations in Natural Gas Networks Caused by Gas-Electric Coupling. , 2015, , .		20

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37	Relaxations of AC Maximal Load Delivery for Severe Contingency Analysis. IEEE Transactions on Power Systems, 2019, 34, 1450-1458.	4.6	18
38	Efficient dynamic compressor optimization in natural gas transmission systems. , 2016, , .		17
39	Unit commitment with N-1 Security and wind uncertainty. , 2016, , .		15
40	Proving global optimality of ACOPF solutions. Electric Power Systems Research, 2020, 189, 106688.	2.1	14
41	Identification of topology changes in power grids using phasor measurements. Applied Stochastic Models in Business and Industry, 2014, 30, 740-752.	0.9	13
42	Accurate load and generation scheduling for linearized DC models with contingencies. , 2012, , .		12
43	Electric power transmission network design for wind generation in the Western United States: Algorithms, methodology, and analysis. , 2010, , .		11
44	Operation of Natural Gas Pipeline Networks With Storage Under Transient Flow Conditions. IEEE Transactions on Control Systems Technology, 2022, 30, 667-679.	3.2	11
45	Optimization of Structural Flood Mitigation Strategies. Water Resources Research, 2019, 55, 1490-1509.	1.7	10
46	Online stochastic reservation systems. Annals of Operations Research, 2009, 171, 101-126.	2.6	9
47	A likelihood ratio anomaly detector for identifying within-perimeter computer network attacks. Journal of Network and Computer Applications, 2016, 66, 166-179.	5. 8	9
48	Synchronization-aware and algorithm-efficient chance constrained optimal power flow., 2013,,.		8
49	Strategic Planning for Power System Restoration. , 2011, , .		7
50	Using Network Metrics to Achieve Computationally Efficient Optimal Transmission Switching., 2013,,.		7
51	Model Bank State Estimation for Power Grids Using Importance Sampling. Technometrics, 2013, 55, 426-435.	1.3	7
52	Piecewise polyhedral formulations for a multilinear term. Operations Research Letters, 2021, 49, 144-149.	0.5	7
53	Optimal economic operation of liquid petroleum products pipeline systems. AICHE Journal, 2021, 67, e17124.	1.8	7
54	Spatial, Temporal, and Hybrid Decompositions for Large-Scale Vehicle Routing with Time Windows. Lecture Notes in Computer Science, 2010, , 99-113.	1.0	7

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55	Pieceâ€wise mixed integer programming for optimal sizing of surge control devices in water distribution systems. Water Resources Research, 2015, 51, 4391-4408.	1.7	6
56	Optimization-Based Formulations for Short-Circuit Studies with Inverter-Interfaced Generation in PowerModelsProtection.jl. Energies, 2021, 14, 2160.	1.6	6
57	Demand Response Analogues for Residential Loads in Natural Gas Networks. IEEE Access, 2021, 9, 161978-161990.	2.6	5
58	N-k Failure Analysis Algorithm for Identification of Extreme Events for Cascading Outage Pre-screening process. , $2019, \ldots$		4
59	N-k interdiction modeling for natural gas networks. Electric Power Systems Research, 2021, 190, 106725.	2.1	4
60	Robust Gas Pipeline Network Expansion Planning to Support Power System Reliability., 2021,,.		3
61	Accuracy of Service Area Estimation Methods Used for Critical Infrastructure Recovery. Lecture Notes in Computer Science, 2014, , 173-191.	1.0	3
62	Mitigating the Impacts of Uncertain Geomagnetic Disturbances on Electric Grids: A Distributionally Robust Optimization Approach. IEEE Transactions on Power Systems, 2022, 37, 4258-4269.	4.6	3
63	Randomized discrepancy bounded local search for transmission expansion planning. , 2011, , .		2
64	Addressing smart grid cyber security. , 2013, , .		2
65	Convex hull formulations for mixed-integer multilinear functions. AIP Conference Proceedings, 2019,	0.3	2
66	Spatial and Objective Decompositions for Very Large SCAPs. Lecture Notes in Computer Science, 2011, , 59-75.	1.0	2
67	Algorithms for mitigating the effect of uncertain geomagnetic disturbances in electric grids. Electric Power Systems Research, 2020, 189, 106790.	2.1	2
68	Credible Interdiction for Transmission Systems. IEEE Transactions on Control of Network Systems, 2021, 8, 738-748.	2.4	1
69	Comparative Analysis of Local Search Strategies for Transmission Network Expansion Planning. Springer Proceedings in Mathematics and Statistics, 2013, , 327-344.	0.1	O