## Jean-Paul Watson

List of Publications by Year in descending order

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39 papers 3,582 citations

411340 20 h-index 33 g-index

39 all docs 39 docs citations

39 times ranked 3022 citing authors

#	Article	IF	CITATIONS
1	Proactive Operations and Investment Planning via Stochastic Optimization to Enhance Power Systems' Extreme Weather Resilience. Journal of Infrastructure Systems, 2021, 27, .	1.0	7
2	Parametric Stochastic Programming with One Chance Constraint: Gaining Insights from Response Space Analysis. Profiles in Operations Research, 2021, , 99-124.	0.3	O
3	An Analysis of Multiple Contaminant Warning System Design Objectives for Sensor Placement Optimization in Water Distribution Networks. Profiles in Operations Research, 2021, , 125-145.	0.3	O
4	Modeling flexible generator operating regions via chance-constrained stochastic unit commitment. Computational Management Science, 2020, 17, 309-326.	0.8	3
5	Optimization-Driven Scenario Grouping. INFORMS Journal on Computing, 2020, 32, 805-821.	1.0	7
6	A novel matching formulation for startup costs in unit commitment. Mathematical Programming Computation, 2020, 12, 225-248.	3.2	12
7	Mixed-integer programming models for optimal constellation scheduling given cloud cover uncertainty. European Journal of Operational Research, 2019, 275, 431-445.	3.5	28
8	pyomo.dae: a modeling and automatic discretization framework for optimization with differential and algebraic equations. Mathematical Programming Computation, 2018, 10, 187-223.	3.2	86
9	A multitree approach for global solution of ACOPF problems using piecewise outer approximations. Computers and Chemical Engineering, 2018, 114, 145-157.	2.0	8
10	Stochastic Unit Commitment Performance Considering Monte Carlo Wind Power Scenarios. , 2018, , .		11
11	Strengthened SOCP Relaxations for ACOPF with McCormick Envelopes and Bounds Tightening. Computer Aided Chemical Engineering, 2018, 44, 1555-1560.	0.3	9
12	Contingency-constrained unit commitment with post-contingency corrective recourse. Annals of Operations Research, 2017, 249, 381-407.	2.6	18
13	BBPH: Using progressive hedging within branch and bound to solve multi-stage stochastic mixed integer programs. Operations Research Letters, 2017, 45, 34-39.	0.5	13
14	Obtaining lower bounds from the progressive hedging algorithm for stochastic mixed-integer programs. Mathematical Programming, 2016, 157, 47-67.	1.6	126
15	Stochastic optimization models in forest planning: a progressive hedging solution approach. Annals of Operations Research, 2015, 232, 259.	2.6	15
16	Integration of progressive hedging and dual decomposition in stochastic integer programs. Operations Research Letters, 2015, 43, 311-316.	0.5	36
17	Toward scalable stochastic unit commitment. Energy Systems, 2015, 6, 417-438.	1.8	50
18	A scalable solution framework for stochastic transmission and generation planning problems. Computational Management Science, 2015, 12, 491-518.	0.8	60

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19	Toward scalable stochastic unit commitment. Part 1: load scenario generation. Energy Systems, 2015, 6, 309-329.	1.8	31
20	Block-oriented modeling of superstructure optimization problems. Computers and Chemical Engineering, 2013, 57, 10-23.	2.0	12
21	Multi-Stage Robust Unit Commitment Considering Wind and Demand Response Uncertainties. IEEE Transactions on Power Systems, 2013, 28, 2708-2717.	4.6	428
22	Two-stage robust optimization for N-k contingency-constrained unit commitment. IEEE Transactions on Power Systems, 2013, 28, 2366-2375.	4.6	160
23	Toward scalable, parallel progressive hedging for stochastic unit commitment. , 2013, , .		64
24	Pyomo $\hat{a}$ $\in$ " Optimization Modeling in Python. Springer Optimization and Its Applications, 2012, , .	0.6	132
25	Modeling and Optimization of Superstructure-based Stochastic Programs for Risk-aware Decision Support. Computer Aided Chemical Engineering, 2012, 31, 1060-1064.	0.3	1
26	PySP: modeling and solving stochastic programs in Python. Mathematical Programming Computation, 2012, 4, 109-149.	3.2	89
27	A Progressive Hedging Approach for Parameter Estimation via Stochastic Nonlinear Programming. Computer Aided Chemical Engineering, 2012, 31, 1507-1511.	0.3	1
28	Formulating and Analyzing Multi-Stage Sensor Placement Problems. , 2011, , .		4
29	Progressive hedging innovations for a class of stochastic mixed-integer resource allocation problems. Computational Management Science, 2011, 8, 355-370.	0.8	214
30	Pyomo: modeling and solving mathematical programs in Python. Mathematical Programming Computation, 2011, 3, 219-260.	3.2	665
31	Formulation and Optimization of Robust Sensor Placement Problems for Drinking Water Contamination Warning Systems. Journal of Infrastructure Systems, 2009, 15, 330-339.	1.0	72
32	Designing Contamination Warning Systems for Municipal Water Networks Using Imperfect Sensors. Journal of Water Resources Planning and Management - ASCE, 2009, 135, 253-263.	1.3	70
33	US Environmental Protection Agency Uses Operations Research to Reduce Contamination Risks in Drinking Water. Interfaces, 2009, 39, 57-68.	1.6	24
34	The Battle of the Water Sensor Networks (BWSN): A Design Challenge for Engineers and Algorithms. Journal of Water Resources Planning and Management - ASCE, 2008, 134, 556-568.	1.3	464
35	Limited-Memory Techniques for Sensor Placement in Water Distribution Networks. Lecture Notes in Computer Science, 2008, , 125-137.	1.0	9
36	Sensor Placement in Municipal Water Networks with Temporal Integer Programming Models. Journal of Water Resources Planning and Management - ASCE, 2006, 132, 218-224.	1.3	232

#	Article	IF	CITATIONS
37	Sensor Placement in Municipal Water Networks. Journal of Water Resources Planning and Management - ASCE, 2005, 131, 237-243.	1.3	222
38	Scheduling Space–Ground Communications for the Air Force Satellite Control Network. Journal of Scheduling, 2004, 7, 7-34.	1.3	166
39	On Mixed-Integer Programming Formulations for the Unit Commitment Problem. INFORMS Journal on Computing, $0,  \ldots$	1.0	33