David L Woodruff

List of Publications by Year
in descending order

61 papers	3,950 citations	201674 27 h-index	197818 49 g-index
61 all docs	61 docs citations	61 times ranked	2735 citing authors

#	Article	IF	Citations
1	CONWIP: a pull alternative to kanban. International Journal of Production Research, 1990, 28, 879-894.	7.5	797
2	Pyomo: modeling and solving mathematical programs in Python. Mathematical Programming Computation, 2011, 3, 219-260.	4.8	665
3	Identification of Outliers in Multivariate Data. Journal of the American Statistical Association, 1996, 91, 1047-1061.	3.1	257
4	Progressive hedging innovations for a class of stochastic mixed-integer resource allocation problems. Computational Management Science, 2011, 8, 355-370.	1.3	214
5	Pyomo â€“ Optimization Modeling in Python. Springer Optimization and Its Applications, 2012, , .	0.9	132
6	Obtaining lower bounds from the progressive hedging algorithm for stochastic mixed-integer programs. Mathematical Programming, 2016, 157, 47-67.	2.4	126
7	Progressive hedging and tabu search applied to mixed integer (0,1) multistage stochastic programming. Journal of Heuristics, 1996, 2, 111.	1.4	119
8	A class of stochastic programs withdecision dependent random elements. Annals of Operations Research, 1998, 82, 83-106.	4.1	113
9	Computable Robust Estimation of Multivariate Location and Shape in High Dimension Using Compound Estimators. Journal of the American Statistical Association, 1994, 89, 888-896.	3.1	105
10	Hashing vectors for tabu search. Annals of Operations Research, 1993, 41, 123-137.	4.1	98
11	Modeling and solving a large-scale generation expansion planning problem under uncertainty. Energy Systems, 2011, 2, 209-242.	3.0	90
12	PySP: modeling and solving stochastic programs in Python. Mathematical Programming Computation, 2012, 4, 109-149.	4.8	89
13	Beam search for peak alignment of NMR signals. Analytica Chimica Acta, 2004, 513, 413-416.	5.4	78
14	Production planning with load dependent lead times: an update of research. Annals of Operations Research, 2007, 153, 297-345.	4.1	75
15	Identification of Outliers in Multivariate Data. Journal of the American Statistical Association, 1996, 91, 1047.	3.1	70
16	Toward scalable, parallel progressive hedging for stochastic unit commitment. , 2013, , .		64
17	Production planning with load dependent lead times. 4or, 2005, 3, 257-302.	1.6	61
18	Progressive hedging as a meta-heuristic applied to stochastic lot-sizing. European Journal of Operational Research, 2001, 132, 116-122.	5.7	56

#	Article	IF	Citations
19	Toward scalable stochastic unit commitment. Energy Systems, 2015, 6, 417-438.	3.0	50
20	Automated screening for metabolites in complex mixtures using 2D COSY NMR spectroscopy. Metabolomics, 2006, 2, 221-233.	3.0	48
21	Heuristic Search Algorithms for the Minimum Volume Ellipsoid. Journal of Computational and Graphical Statistics, 1993, 2, 69-95.	1.7	46
22	Computable Robust Estimation of Multivariate Location and Shape in High Dimension Using Compound Estimators. Journal of the American Statistical Association, 1994, 89, 888.	3.1	43
23	Heuristics for Multi-Stage Interdiction of Stochastic Networks. Journal of Heuristics, 2005, 11, 483-500.	1.4	42
24	SEQUENCING AND BATCHING FOR TWO CLASSES OF JOBS WITH DEADLINES AND SETUP TIMES. Production and Operations Management, 1992, 1, 87-102.	3.8	41
25	A decomposition algorithm applied to planning the interdiction of stochastic networks. Naval Research Logistics, 2005, 52, 321-328.	2.2	39
26	Generating shortâ€term probabilistic wind power scenarios via nonparametric forecast error density estimators. Wind Energy, 2017, 20, 1911-1925.	4.2	37
27	Integration of progressive hedging and dual decomposition in stochastic integer programs. Operations Research Letters, 2015, 43, 311-316.	0.7	36
28	Toward scalable stochastic unit commitment. Part 1: load scenario generation. Energy Systems, 2015, 6, 309-329.	3.0	31
29	Multi-period forecasting and scenario generation with limited data. Computational Management Science, 2015, 12, 267-295.	1.3	28
30	Constructing probabilistic scenarios for wide-area solar power generation. Solar Energy, 2018, 160, 153-167.	6.1	28
31	Multi-stage scenario generation by the combined moment matching and scenario reduction method. Operations Research Letters, 2014, 42, 374-377.	0.7	23
32	Experiments concerning sequential versus simultaneous maximization of objective function and distance. Journal of Heuristics, 2008, 14, 613-625.	1.4	22
33	Interdicting Stochastic Networks with Binary Interdiction Effort. , 2003, , 69-84.		21
34	How to select a small set of diverse solutions to mixed integer programming problems. Operations Research Letters, 2009, 37, 255-260.	0.7	21
35	A distance function to support optimized selection decisions. Decision Support Systems, 2005, 39, 345-354.	5.9	16
36	Scalable Heuristics for a Class of Chance-Constrained Stochastic Programs. INFORMS Journal on Computing, 2010, 22, 543-554.	1.7	16

#	Article	IF	Citations
37	Stochastic optimization models in forest planning: a progressive hedging solution approach. Annals of Operations Research, 2015, 232, 259.	4.1	15
38	Stochastic programming for flexible global supply chain planning. Flexible Services and Manufacturing Journal, 2017, 29, 601-633.	3.4	14
39	Cluster Analysis for Large Datasets: An Effective Algorithm for Maximizing the Mixture Likelihood. Journal of Computational and Graphical Statistics, 2000, 9, 672.	1.7	13
40	BBPH: Using progressive hedging within branch and bound to solve multi-stage stochastic mixed integer programs. Operations Research Letters, 2017, 45, 34-39.	0.7	13
41	Selection of an optimal subset of sizes. International Journal of Production Research, 1999, 37, 3697-3710.	7.5	12
42	Stochastic Unit Commitment Performance Considering Monte Carlo Wind Power Scenarios. , 2018, , .		11
43	Cell2Fire: A Cell-Based Forest Fire Growth Model to Support Strategic Landscape Management Planning. Frontiers in Forests and Global Change, 2021, 4, .	2.3	11
44	Experiments with, and on, algorithms for maximum likelihood clustering. Computational Statistics and Data Analysis, 2004, 47, 237-253.	1.2	10
45	Cluster Analysis for Large Datasets: An Effective Algorithm for Maximizing the Mixture Likelihood. Journal of Computational and Graphical Statistics, 2000, 9, 672-688.	1.7	9
46	Discrete Lot-Sizing and Scheduling with Sequence-Dependent Setup Times and Costs Including Deterioration and Perishability Constraints. , 2011, , .		8
47	Ghost Image Processing for Minimum Covariance Determinants. ORSA Journal on Computing, 1995, 7, 468-473.	1.7	7
48	A new approximation method for generating day-ahead load scenarios. , 2013, , .		7
49	Progressive Hedging Innovations for a Class of Stochastic Resource Allocation Problems. SSRN Electronic Journal, 0, , .	0.4	6
50	Load Dependent Lead Times â€" From Empirical Evidence to Mathematical Modeling. , 2005, , 539-554.		5
51	Parmest: Parameter Estimation Via Pyomo. Computer Aided Chemical Engineering, 2019, , 41-46.	0.5	4
52	Preface: logistics, optimization and transportationâ€"in memory of the late Arne LÃ¸kketangen. Annals of Operations Research, 2017, 253, 709-711.	4.1	3
53	Generating Stochastic Ellipsoidal Forest and Wildland Fire Scar Scenarios for Strategic Forest Management Planning under Uncertainty. Forest Science, 2015, 61, 494-508.	1.0	1
54	Chance and service level constraints for stochastic generation expansion planning. NETNOMICS: Economic Research and Electronic Networking, 2015, 16, 169-191.	0.9	1

#	Article	IF	Citations
55	Stochastic Programming for Global Supply Chain Planning Under Uncertainty: An Outline. Lecture Notes in Computer Science, 2017, , 437-451.	1.3	1
56	A stochastic programming approach to solve a coordinated capacitated stochastic dynamic demand lot-sizing problem with emergency supplies. International Journal of Logistics Systems and Management, 2018, 29, 173.	0.2	1
57	A Progressive Hedging Approach for Parameter Estimation via Stochastic Nonlinear Programming. Computer Aided Chemical Engineering, 2012, 31, 1507-1511.	0.5	1
58	Software for Creating Stochastic Scenarios for Optimization from Data. Computer Aided Chemical Engineering, 2018, , 1531-1536.	0.5	0
59	Mape_Maker: A Scenario Creator. Energy Systems, 2020, , 1.	3.0	0
60	Heuristic Search for 2D NMR Alignment to Support Metabolite Identification. Lecture Notes in Computer Science, 2007, , 447-458.	1.3	0
61	Parametric Stochastic Programming with One Chance Constraint: Gaining Insights from Response Space Analysis. Profiles in Operations Research, 2021, , 99-124.	0.4	0