David W Coit

List of Publications by Year
in descending order

106 papers	7,290 citations	101535 36 h-index	56717 83 g-index
109 all docs	109 docs citations	109 times ranked	4911 citing authors

#	Article	IF	Citations
1	Joint Optimization of Spare Part Supply and Opportunistic Condition-Based Maintenance for Onshore Wind Farms Considering Maintenance Route. IEEE Transactions on Engineering Management, 2024, 71, 1086-1102.	3.5	8
2	Dynamic maintenance model for a repairable multi-component system using deep reinforcement learning. Quality Engineering, 2022, 34, 16-35.	1.1	22
3	Seizing Opportunity: Maintenance Optimization in Offshore Wind Farms Considering Accessibility, Production, and Crew Dispatch. IEEE Transactions on Sustainable Energy, 2022, 13, 111-121.	8.8	26
4	Multi-Objective Trip Planning With Solution Ranking Based on User Preference and Restaurant Selection. IEEE Access, 2022, 10, 10688-10705.	4.2	13
5	Guest Editorial: SMRLO-2019 Special Issue. Proceedings of the Institution of Mechanical Engineers, Part O: Journal of Risk and Reliability, 2022, 236, 223-224.	0.7	0
6	A review of Pareto pruning methods for multi-objective optimization. Computers and Industrial Engineering, 2022, 167, 108022.	6.3	45
7	Reliability assessment and lifetime prediction of degradation processes considering recoverable shock damages. IISE Transactions, 2021, 53, 614-628.	2.4	24
8	Markov additive processes for degradation with jumps under dynamic environments. Naval Research Logistics, 2021, 68, 908-919.	2.2	3
9	A storage expansion planning framework using reinforcement learning and simulation-based optimization. Applied Energy, 2021, 290, 116778.	10.1	13
10	Optimal control-limit maintenance policy for a production system with multiple process states. Computers and Industrial Engineering, 2021, 158, 107454.	6.3	10
11	Reinforcement learning for dynamic condition-based maintenance of a system with individually repairable components. Quality Engineering, 2020, 32, 388-408.	1.1	38
12	Dynamic maintenance policy for systems with repairable components subject to mutually dependent competing failure processes. Computers and Industrial Engineering, 2020, 143, 106398.	6.3	27
13	Game theory based solution selection for multi-objective redundancy allocation in interval-valued problem parameters. Reliability Engineering and System Safety, 2020, 199, 106932.	8.9	15
14	Reliability analysis of systems considering clusters of dependent degrading components. Reliability Engineering and System Safety, 2020, 202, 107005.	8.9	29
15	Assessing the effects of power grid expansion on human health externalities. Socio-Economic Planning Sciences, 2019, 66, 92-104.	5.0	16
16	Start-Up Demonstration Tests With the Intent of Equipment Classification for Balanced Systems. IEEE Transactions on Reliability, 2019, 68, 161-174.	4.6	17
17	Degradation Modeling and Lifetime Prediction Considering Effective Shocks in a Dynamic Environment. IEEE Transactions on Reliability, 2019, 68, 819-830.	4.6	12
18	Economic trends and comparisons for optimizing grid-outage resilient photovoltaic and battery systems. Applied Energy, 2019, 256, 113892.	10.1	23

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19	A risk-averse stochastic program for integrated system design and preventive maintenance planning. European Journal of Operational Research, 2019, 276, 536-548.	5.7	25
20	Optimization of on-condition thresholds for a system of degrading components with competing dependent failure processes. Reliability Engineering and System Safety, 2019, 192, 106547.	8.9	40
21	A Metamodeling Framework for Quantifying Health Damages of Power Grid Expansion Plans. International Journal of Environmental Research and Public Health, 2019, 16, 1857.	2.6	1
22	The evolution of system reliability optimization. Reliability Engineering and System Safety, 2019, 192, 106259.	8.9	97
23	Reliability optimization of series-parallel systems with K-mixed redundancy strategy. Reliability Engineering and System Safety, 2019, 183, 17-28.	8.9	53
24	Economic and resilience benefit analysis of incorporating battery storage to photovoltaic array generation. Renewable Energy, 2019, 135, 652-662.	8.9	36
25	Optimal System Design and Sequential Preventive Maintenance Under Uncertain Aperiodic-Changing Stresses. IEEE Transactions on Reliability, 2018, 67, 907-919.	4.6	15
26	Priority rules-based algorithmic design on two-sided assembly line balancing. Production Engineering, 2018, 12, 95-108.	2.3	9
27	Resiliency-based optimization of restoration policies for electric power distribution systems. Electric Power Systems Research, 2018, 161, 188-198.	3.6	41
28	System Reliability Modeling Considering Correlated Probabilistic Competing Failures. IEEE Transactions on Reliability, 2018, 67, 416-431.	4.6	23
29	Combined effects of load dynamics and dependence clusters on cascading failures in network systems. Reliability Engineering and System Safety, 2018, 170, 116-126.	8.9	53
30	Redundancy Allocation for Serial-Parallel System Considering Heterogeneity of Components. , 2018, , .		0
31	Generation expansion planning considering health and societal damages – A simulation-based optimization approach. Energy, 2018, 164, 951-963.	8.8	32
32	Optimal Time Interval Between Periodic Inspections for a Two-Component Cold Standby Multistate System. IEEE Transactions on Reliability, 2017, 66, 559-574.	4.6	22
33	An approximation method for evaluating the reliability of a dynamic k-out-of-n:F system subjected to cyclic alternating operation conditions. Proceedings of the Institution of Mechanical Engineers, Part O: Journal of Risk and Reliability, 2017, 231, 109-120.	0.7	6
34	Performance Analysis for a Wireless Sensor Network of Star Topology with Random Nodes Deployment. Wireless Personal Communications, 2017, 97, 3993-4013.	2.7	29
35	Combined Redundancy Allocation and Maintenance Planning Using a Two-Stage Stochastic Programming Model for Multiple Component Systems. IEEE Transactions on Reliability, 2017, 66, 950-962.	4.6	28
36	Reliability assessment of competing risks with generalized mixed shock models. Reliability Engineering and System Safety, 2017, 159, 1-11.	8.9	112

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37	Game-theoretic models for electric distribution resiliency/reliability from a multiple stakeholder perspective. IISE Transactions, 2017, 49, 159-177.	2.4	16
38	Reliability Analysis and Condition‐based Maintenance for Failure Processes with Degradation‐dependent Hard Failure Threshold. Quality and Reliability Engineering International, 2017, 33, 1351-1366.	2.3	31
39	A novel strategy for redundant components in reliability--redundancy allocation problems. IIE Transactions, 2016, 48, 1043-1057.	2.1	63
40	A Multi‐objective Joint Burn‐in and Imperfect Condition‐based Maintenance Model for Degradation‐based Heterogeneous Populations. Quality and Reliability Engineering International, 2016, 32, 2739-2750.	2.3	8
41	Reliability analysis and condition-based maintenance of systems with dependent degrading components based on thermodynamic physics-of-failure. International Journal of Advanced Manufacturing Technology, 2016, 86, 913-923.	3.0	24
42	System redundancy optimization with uncertain stress-based component reliability: Minimization of regret. Reliability Engineering and System Safety, 2016, 154, 73-83.	8.9	27
43	Reliability Modeling on Consecutive-<inline-formula> <tex-math notation="LaTeX">$k_r $</tex-math> </inline-formula>-out-of-<inline-formula> <tex-math notation="LaTeX">$n_r $</tex-math> </inline-formula>:F Linear Zigzag Structure and Circular Polygon Structure. IEEE Transactions on Reliability, 2016, 65, 1509-1521.	4.6	35
44	Stochastic optimization for electric power generation expansion planning with discrete climate change scenarios. Electric Power Systems Research, 2016, 140, 401-412.	3.6	36
45	Reliability analysis of multiple-component series systems subject to hard and soft failures with dependent shock effects. IIE Transactions, 2016, 48, 720-735.	2.1	86
46	Joint optimization of production scheduling and machine group preventive maintenance. Reliability Engineering and System Safety, 2016, 146, 68-78.	8.9	133
47	Life distribution analysis based on <scp>L</scp>évy subordinators for degradation with random jumps. Naval Research Logistics, 2015, 62, 483-492.	2.2	30
48	Reliability and condition-based maintenance for multi-stent systems with stochastic-dependent competing risk processes. International Journal of Advanced Manufacturing Technology, 2015, 80, 2027-2040.	3.0	10
49	Mean-risk stochastic electricity generation expansion planning problems with demand uncertainties considering conditional-value-at-risk and maximum regret as risk measures. International Journal of Electrical Power and Energy Systems, 2015, 73, 309-317.	5.5	21
50	Modeling zoned shock effects on stochastic degradation in dependent failure processes. IIE Transactions, 2015, 47, 460-470.	2.1	106
51	Dynamic k-out-of-n system reliability with component partnership. Reliability Engineering and System Safety, 2015, 138, 82-92.	8.9	38
52	Stochastic multiple objective electric Generation Expansion Planning. , 2015, , .		3
53	Establishment of the optimal time interval between periodic inspections for redundant systems. Reliability Engineering and System Safety, 2014, 131, 148-165.	8.9	32
54	Reliability Analysis for Multi-Component Systems Subject to Multiple Dependent Competing Failure Processes. IEEE Transactions on Reliability, 2014, 63, 331-345.	4.6	195

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55	Accelerated burn-in and condition-based maintenance for *n*-subpopulations subject to stochastic degradation. IIE Transactions, 2014, 46, 1093-1106.	2.1	25
56	Reliability for systems of degrading components with distinct component shock sets. Reliability Engineering and System Safety, 2014, 132, 115-124.	8.9	94
57	Criticality measures for components with multi-dimensional degradation. IIE Transactions, 2014, 46, 987-998.	2.1	30
58	Reliability modeling for dependent competing failure processes with changing degradation rate. IIE Transactions, 2014, 46, 483-496.	2.1	212
59	Corrections to â€œComponent Reliability Criticality or Importance Measures for Systems With Degrading Componentsâ€•[Mar 12 4-12]. IEEE Transactions on Reliability, 2013, 62, 746-747.	4.6	1
60	System level reliability analyses and predictions in a varying stress environment. , 2013, , .		2
61	Multicriteria Planning for Distributed Wind Generation Under Strategic Maintenance. IEEE Transactions on Power Delivery, 2013, 28, 357-367.	4.3	55
62	Condition-based maintenance for continuously monitored degrading systems with multiple failure modes. IIE Transactions, 2013, 45, 422-435.	2.1	141
63	Dynamic k-out-of-n system with component partnership design with two dependent competing failure processes. , 2013, , .		1
64	*n*Subpopulations experiencing stochastic degradation: reliability modeling, burn-in, and preventive replacement optimization. IIE Transactions, 2013, 45, 391-408.	2.1	41
65	Reliability modeling for ramp-stress accelerated degradation testing. , 2012, , .		1
66	Reliability analysis for k-out-of-n systems subject to multiple dependent competing failure processes. , 2012, , .		6
67	Dynamic k-out-of-n system reliability for redundant local area networks. , 2012, , .		11
68	A framework for condition-based maintenance scheduling. , 2012, , .		0
69	Reliability and Maintenance Modeling for Dependent Competing Failure Processes With Shifting Failure Thresholds. IEEE Transactions on Reliability, 2012, 61, 932-948.	4.6	158
70	Reliability modeling of a series system with correlated or dependent component degradation processes. , 2011, , .		9
71	System reliability models with stress covariates for changing load profiles. , 2011, , .		3
72	Reliability analysis for dependent failure processes and dependent failure threshold. , 2011, , .		12

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73	System Reliability Optimization Considering Uncertainty: Minimization of the Coefficient of Variation for Series-Parallel Systems. IEEE Transactions on Reliability, 2011, 60, 667-674.	4.6	40
74	Optimal burn-in for n-subpopulations with stochastic degradation. , 2011, , .		1
75	A degradation-based model for joint optimization of burn-in, quality inspection, and maintenance: a light display device application. International Journal of Advanced Manufacturing Technology, 2010, 50, 801-808.	3.0	26
76	Redundancy Allocation for Series-Parallel Systems Using a Column Generation Approach. IEEE Transactions on Reliability, 2010, 59, 706-717.	4.6	60
77	Multi-period multi-objective electricity generation expansion planning problem with Monte-Carlo simulation. Electric Power Systems Research, 2010, 80, 1394-1405.	3.6	119
78	Neural Network Models to Anticipate Failures of Airport Ground Transportation Vehicle Doors. IEEE Transactions on Automation Science and Engineering, 2010, 7, 183-188.	5.2	11
79	Reliability and maintenance modeling for systems subject to multiple dependent competing failure processes. IIE Transactions, 2010, 43, 12-22.	2.1	298
80	Multi-state component importance analysis using multi-state multi-valued decision diagrams. , 2009, , .		6
81	A decision analytic approach for technology portfolio prioritization: aviation safety applications. Journal of Risk Research, 2009, 12, 843-864.	2.6	3
82	Review and comparison of system reliability optimization algorithms considering reliability estimation uncertainty. , 2009, , .		7
83	Pruned Pareto-optimal sets for the system redundancy allocation problem based on multiple prioritized objectives. Journal of Heuristics, 2008, 14, 335-357.	1.4	51
84	Unbiased Variance Estimates for System Reliability Estimate Using Block Decompositions. IEEE Transactions on Reliability, 2008, 57, 458-464.	4.6	17
85	Multi-objective scheduling problems: Determination of pruned Pareto sets. IIE Transactions, 2008, 40, 552-564.	2.1	54
86	Data Clustering of Solutions for Multiple Objective System Reliability Optimization Problems. Quality Technology and Quantitative Management, 2007, 4, 191-210.	1.9	68
87	Determination of Pruned Pareto Sets for the Multi-Objective System Redundancy Allocation Problem. , 2007, , .		5
88	Reliability and Degradation Modeling with Random or Uncertain Failure Threshold. , 2007, , .		39
89	Fault-tolerant embedded system design and optimization considering reliability estimation uncertainty. Reliability Engineering and System Safety, 2007, 92, 395-407.	8.9	36
90	Practical solutions for multi-objective optimization: An application to system reliability design problems. Reliability Engineering and System Safety, 2007, 92, 314-322.	8.9	125

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91	A generalized multistate-based path vector approach to multistate two-terminal reliability. IIE Transactions, 2006, 38, 477-488.	2.1	71
92	Multi-objective optimization using genetic algorithms: A tutorial. Reliability Engineering and System Safety, 2006, 91, 992-1007.	8.9	2,489
93	A Method for Correlating Field Life Degradation with Reliability Prediction for Electronic Modules. Quality and Reliability Engineering International, 2005, 21, 715-726.	2.3	26
94	TEST PLAN ALLOCATION TO MINIMIZE SYSTEM RELIABILITY ESTIMATION VARIABILITY. International Journal of Reliability, Quality and Safety Engineering, 2004, 11, 257-272.	0.6	8
95	Maximization of System Reliability with a Choice of Redundancy Strategies. IIE Transactions, 2003, 35, 535-543.	2.1	184
96	Efficiently Solving the Redundancy Allocation Problem Using Tabu Search. IIE Transactions, 2003, 35, 515-526.	2.1	247
97	Cold-standby redundancy optimization for nonrepairable systems. IIE Transactions, 2001, 33, 471-478.	2.1	191
98	Cold-standby redundancy optimization for nonrepairable systems. IIE Transactions, 2001, 33, 471-478.	2.1	19
99	Gamma distribution parameter estimation for field reliability data with missing failure times. IIE Transactions, 2000, 32, 1161-1166.	2.1	45
100	Gamma distribution parameter estimation for field reliability data with missing failure times. IIE Transactions, 2000, 32, 1161-1166.	2.1	10
101	SYSTEM RELIABILITY OPTIMIZATION WITH k-OUT-OF-n SUBSYSTEMS. International Journal of Reliability, Quality and Safety Engineering, 2000, 07, 129-142.	0.6	128
102	Analysis of grouped data from field-failure reporting systems. Reliability Engineering and System Safety, 1999, 65, 95-101.	8.9	31
103	Economic allocation of test times for subsystem-level reliability growth testing. IIE Transactions, 1998, 30, 1143-1151.	2.1	1
104	Economic allocation of test times for subsystem-level reliability growth testing. IIE Transactions, 1998, 30, 1143-1151.	2.1	36
105	Practical Guide to Experimental Design. IIE Transactions, 1997, 29, 1083-1084.	2.1	0
106	Penalty guided genetic search for reliability design optimization. Computers and Industrial Engineering, 1996, 30, 895-904.	6.3	177