Laura A Mclay

List of Publications by Year
in descending order

74	2,023	257101 24	276539 41
papers	citations	h-index	g-index

76	76	76	1159
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Resilience-driven restoration model for interdependent infrastructure networks. Reliability Engineering and System Safety, 2019, 185, 12-23.	5.1	144
2	Joint location and dispatching decisions for Emergency Medical Services. Computers and Industrial Engineering, 2013, 64, 917-928.	3.4	112
3	Evaluating emergency medical service performance measures. Health Care Management Science, 2010, 13, 124-136.	1.5	88
4	Improving emergency service in rural areas: a bi-objective covering location model for EMS systems. Annals of Operations Research, 2014, 221, 133-159.	2.6	84
5	A model for optimally dispatching ambulances to emergency calls with classification errors in patient priorities. IIE Transactions, 2013, 45, 1-24.	2.1	78
6	The minimump-envy location problem: a new model for equitable distribution of emergency resources. IIE Transactions on Healthcare Systems Engineering, 2011, 1, 101-115.	0.8	73
7	A maximum expected covering location model with two types of servers. IIE Transactions, 2009, 41, 730-741.	2.1	69
8	Risk-Based Policies for Airport Security Checkpoint Screening. Transportation Science, 2010, 44, 333-349.	2.6	68
9	A Dispatching Model for Server-to-Customer Systems That Balances Efficiency and Equity. Manufacturing and Service Operations Management, 2013, 15, 205-220.	2.3	66
10	Priority dispatching strategies for EMS systems. Journal of the Operational Research Society, 2014, 65, 572-587.	2.1	59
11	A multilevel passenger screening problem for aviation security. Naval Research Logistics, 2006, 53, 183-197.	1.4	58
12	Robust Adversarial Risk Analysis: A Level-kApproach. Decision Analysis, 2012, 9, 41-54.	1.2	57
13	Is Screening Cargo Containers for Smuggled Nuclear Threats Worthwhile?. Decision Analysis, 2010, 7, 155-171.	1.2	47
14	A Sequential Stochastic Security System Design Problem for Aviation Security. Transportation Science, 2007, 41, 182-194.	2.6	46
15	A nested-compliance table policy for emergency medical service systems under relocation. Omega, 2016, 58, 154-168.	3.6	42
16	A sequential stochastic passenger screening problem for aviation security. IIE Transactions, 2009, 41, 575-591.	2.1	37
17	Optimal dispatching strategies for emergency vehicles to increase patient survivability. International Journal of Operational Research, 2012, 15, 195.	0.1	36
18	Districting and dispatching policies for emergency medical service systems to improve patient survival. IIE Transactions on Healthcare Systems Engineering, 2013, 3, 39-56.	0.8	36

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19	Integer programming models and analysis for a multilevel passenger screening problem. IIE Transactions, 2007, 39, 73-81.	2.1	34
20	Reducing disparities in large-scale emergency medical service systems. Journal of the Operational Research Society, 2015, 66, 1169-1181.	2.1	33
21	An integrated network design and scheduling problem for network recovery and emergency response. Operations Research Perspectives, 2018, 5, 218-231.	1.2	33
22	A Stochastic Programming Approach for Locating and Dispatching Two Types of Ambulances. Transportation Science, 2021, 55, 275-296.	2.6	32
23	The Economic Impact of Obesity on Automobile Fuel Consumption. Engineering Economist, 2006, 51, 307-323.	0.3	31
24	A Maximum Expected Covering Problem for District Design. Transportation Science, 2017, 51, 376-390.	2.6	30
25	Identifying tradeâ€offs in equity and efficiency for simultaneously optimizing location and multipriority dispatch of ambulances. International Transactions in Operational Research, 2019, 26, 415-438.	1.8	28
26	DVT Surveillance Program in the ICU: Analysis of Cost-Effectiveness. PLoS ONE, 2014, 9, e106793.	1.1	25
27	Interdicting nuclear material on cargo containers usingÂknapsack problem models. Annals of Operations Research, 2011, 187, 185-205.	2.6	24
28	Multilevel, threshold-based policies for cargo container security screening systems. European Journal of Operational Research, 2012, 220, 522-529.	3.5	24
29	Recommendations for dispatching emergency vehicles under multitiered response via simulation. International Transactions in Operational Research, 2014, 21, 581-617.	1.8	23
30	A budgeted maximum multiple coverage model for cybersecurity planning and management. IISE Transactions, 2019, 51, 1303-1317.	1.6	23
31	A Robust Approach for Mitigating Risks in Cyber Supply Chains. Risk Analysis, 2019, 39, 2076-2092.	1.5	22
32	Modeling and analyzing multiple station baggage screening security system performance. Naval Research Logistics, 2005, 52, 30-45.	1.4	21
33	Modeling Equity for Allocating Public Resources. Profiles in Operations Research, 2012, , 97-118.	0.3	21
34	Analyzing the volume and nature of emergency medical calls during severe weather events using regression methodologies. Socio-Economic Planning Sciences, 2012, 46, 55-66.	2.5	21
35	The minimum p-envy location problem with requirement on minimum survival rate. Computers and Industrial Engineering, 2014, 74, 228-239.	3.4	20
36	A maximum expected covering problem for locating and dispatching two classes of military medical evacuation air assets. Optimization Letters, 2015, 9, 1511-1531.	0.9	20

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37	A dynamic ambulance routing model with multiple response. Transportation Research, Part E: Logistics and Transportation Review, 2020, 133, 101807.	3.7	20
38	Using simulation-optimization to construct screening strategies for cervical cancer. Health Care Management Science, 2010, 13, 294-318.	1.5	19
39	The tradeoff between technology and prescreening intelligence in checked baggage screening for aviation security. Journal of Transportation Security, 2008, 1, 107-126.	0.9	18
40	Integer Programming Models for Deployment of Airport Baggage Screening Security Devices. Optimization and Engineering, 2005, 6, 339-359.	1.3	17
41	Designing Aviation Security Passenger Screening Systems Using Nonlinear Control. SIAM Journal on Control and Optimization, 2009, 48, 2085-2105.	1.1	16
42	An approximate hypercube model for public service systems with co-located servers and multiple response. Transportation Research, Part E: Logistics and Transportation Review, 2017, 103, 143-157.	3.7	16
43	A maximal multiple coverage and network restoration problem for disaster recovery. Operations Research Perspectives, 2020, 7, 100132.	1.2	16
44	An expected coverage model with a cutoff priority queue. Health Care Management Science, 2018, 21, 517-533.	1.5	16
45	Algorithms for the bounded set-up knapsack problem. Discrete Optimization, 2007, 4, 206-212.	0.6	15
46	Interdiction models for delaying adversarial attacks against critical information technology infrastructure. Naval Research Logistics, 2019, 66, 411-429.	1.4	15
47	Optimal search strategies using simultaneous generalized hill climbing algorithms. Mathematical and Computer Modelling, 2006, 43, 1061-1073.	2.0	14
48	Evaluating the impact of performance goals on dispatching decisions in emergency medical service. IIE Transactions on Healthcare Systems Engineering, 2011, 1, 185-196.	0.8	14
49	Joint relocation and districting using a nested compliance model for EMS systems. Computers and Industrial Engineering, 2020, 142, 106327.	3.4	14
50	Dynamic dispatch policies for emergency response with multiple types of vehicles. Transportation Research, Part E: Logistics and Transportation Review, 2021, 152, 102405.	3.7	14
51	Infrastructure Systems, Risk Analysis, and Resilience-Research Gaps and Opportunities. Risk Analysis, 2015, 35, 560-561.	1.5	11
52	Simultaneous Generalized Hill-Climbing Algorithms for Addressing Sets of Discrete Optimization Problems. INFORMS Journal on Computing, 2005, 17, 438-450.	1.0	10
53	A survey of optimization models and methods for cyberinfrastructure security. IISE Transactions, 2021, 53, 182-198.	1.6	10
54	An integrated model for screening cargo containers. European Journal of Operational Research, 2013, 230, 181-189.	3.5	9

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55	An exact algorithm for solving the bilevel facility interdiction and fortification problem. Operations Research Letters, 2018, 46, 573-578.	0.5	9
56	Designing pandemic-resilient voting systems. Socio-Economic Planning Sciences, 2022, 80, 101174.	2.5	9
57	Integer knapsack problems with set-up weights. Computational Optimization and Applications, 2007, 37, 35-47.	0.9	8
58	Determining minimum staffing levels during snowstorms using an integrated simulation, regression, and reliability model. Health Care Management Science, 2013, 16, 14-26.	1.5	8
59	Risk management for cyber-infrastructure protection: A bi-objective integer programming approach. Reliability Engineering and System Safety, 2021, 205, 107093.	5.1	8
60	Performance Analysis of Cyclical Simulated Annealing Algorithms. Methodology and Computing in Applied Probability, 2005, 7, 183-201.	0.7	7
61	A review of risk-based security and its impact on TSA PreCheck. IISE Transactions, 2021, 53, 657-670.	1.6	6
62	Task recommendations for self-assigning spontaneous volunteers. Computers and Industrial Engineering, 2022, 163, 107798.	3.4	6
63	Homeland security research opportunities. IISE Transactions, 2023, 55, 22-31.	1.6	6
64	Hanover County Improves Its Response to Emergency Medical 911 Patients. Interfaces, 2012, 42, 380-394.	1.6	5
65	Dispatching policies during prolonged mass casualty incidents. Journal of the Operational Research Society, 2022, 73, 2536-2550.	2.1	4
66	Applying statistical tests to empirically compare tabu search parameters for MAX 3-SATISFIABILITY: A case studyâˆ†. Omega, 2009, 37, 522-534.	3.6	2
67	Impact of a community-policing initiative promoting substance use disorder treatment over criminal charges on arrest recidivism. Drug and Alcohol Dependence, 2021, 227, 108915.	1.6	2
68	Visiting near-optimal solutions using local search algorithms. , 2006, , 471-481.		2
69	Efficient Genetic Algorithms Using Discretization Scheduling. Evolutionary Computation, 2005, 13, 353-385.	2.3	1
70	Rethinking the encounter probability for direct-to-target nuclear attacks for aviation security. Journal of Transportation Security, 2011, 4, 247-280.	0.9	1
71	Expert Judgment Based Nuclear Threat Assessment for Vessels Arriving in the US. Profiles in Operations Research, 2018, , 495-509.	0.3	1
72	Guidance on Publishing in the Mathematical Modeling Area forRisk Analysis. Risk Analysis, 2014, 34, 1778-1779.	1.5	0

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73	Engaging the Media: Telling Our Operations Research Stories to the Public. SN Operations Research Forum, 2020, 1, 1.	0.6	0
74	Location of trauma care resources with inter-facility patient transfers. Operations Research Perspectives, 2021, 8, 100206.	1.2	0