Karl F Doerner

List of Publications by Citations

110 papers	4,941 citations
36 h-index	69 g-index
118 ext. papers	5,644 ext. citations
2.8 avg, IF	5.83 L-index

#	Paper	IF	Citations
110	A survey on pickup and delivery problems. *Journal Für Betriebswirtschaft*, **2008**, 58, 21-51		383
109	A survey on pickup and delivery problems. *Journal Für Betriebswirtschaft*, **2008**, 58, 81-117		375
108	Pareto Ant Colony Optimization: A Metaheuristic Approach to Multiobjective Portfolio Selection. *Annals of Operations Research*, **2004**, 131, 79-99	3.2	281
107	D-Ants: Savings Based Ants divide and conquer the vehicle routing problem. *Computers and Operations Research*, **2004**, 31, 563-591	4.6	261
106	A variable neighborhood search heuristic for periodic routing problems. *European Journal of Operational Research*, **2009**, 195, 791-802	5.6	196
105	Ambulance location and relocation problems with time-dependent travel times. *European Journal of Operational Research*, **2010**, 207, 1293-1303	5.6	167
104	A Variable Neighborhood Search for the Multi Depot Vehicle Routing Problem with Time Windows. *Journal of Heuristics*, **2004**, 10, 613-627	1.9	161
103	Ant colony optimization for the two-dimensional loading vehicle routing problem. *Computers and Operations Research*, **2009**, 36, 655-673	4.6	145
102	Heuristics for the multi-period orienteering problem with multiple time windows. *Computers and Operations Research*, **2010**, 37, 351-367	4.6	131
101	Variable neighborhood search for the dial-a-ride problem. *Computers and Operations Research*, **2010**, 37, 1129-1138	4.6	128
100	Metaheuristics for the bi-objective orienteering problem. *Swarm Intelligence*, **2009**, 3, 179-201	3	117
99	Pareto ant colony optimization with ILP preprocessing in multiobjective project portfolio selection. *European Journal of Operational Research*, **2006**, 171, 830-841	5.6	116
98	Delivery strategies for blood products supplies. *OR Spectrum*, **2009**, 31, 707-725	1.9	109
97	Metaheuristics for vehicle routing problems with three-dimensional loading constraints. *European Journal of Operational Research*, **2010**, 201, 751-759	5.6	109
96	Adaptive large neighborhood search for service technician routing and scheduling problems. *Journal of Scheduling*, **2012**, 15, 579-600	1.6	97
95	Multicriteria tour planning for mobile healthcare facilities in a developing country. *European Journal of Operational Research*, **2007**, 179, 1078-1096	5.6	96
94	Multi-criteria location planning for public facilities in tsunami-prone coastal areas. *OR Spectrum*, **2009**, 31, 651-678	1.9	91

93	Metaheuristics for the dynamic stochastic dial-a-ride problem with expected return transports. *Computers and Operations Research*, **2011**, 38, 1719-1730	4.6	87
92	A variable neighborhood search for the capacitated arc routing problem with intermediate facilities. *Journal of Heuristics*, **2008**, 14, 405-423	1.9	85
91	Vendor managed inventory for environments with stochastic product usage. *European Journal of Operational Research*, **2010**, 202, 686-695	5.6	82
90	Risk approaches for delivering disaster relief supplies. *OR Spectrum*, **2011**, 33, 543-569	1.9	77
89	Determining location and size of medical departments in a hospital network: a multiobjective decision support approach. *Health Care Management Science*, **2004**, 7, 63-71	4	74
88	Rich routing problems arising in supply chain management. *European Journal of Operational Research*, **2013**, 224, 435-448	5.6	73
87	Models and algorithms for the heterogeneous dial-a-ride problem with driver-related constraints. *OR Spectrum*, **2012**, 34, 593-633	1.9	64
86	Metaheuristics for the Order Batching Problem in Manual Order Picking Systems. *Business Research*, **2010**, 3, 82-105	3.8	64
85	Integrating stochastic time-dependent travel speed in solution methods for the dynamic dial-a-ride problem. *European Journal of Operational Research*, **2014**, 238, 18-30	5.6	62
84	A heuristic solution method for node routing based solid waste collection problems. *Journal of Heuristics*, **2013**, 19, 129-156	1.9	62
83	A heuristic two-phase solution approach for the multi-objective dial-a-ride problem. *Networks*, **2009**, 54, 227-242	1.6	58
82	Exact and heuristic algorithms for the vehicle routing problem with multiple interdependent time windows. *Computers and Operations Research*, **2008**, 35, 3034-3048	4.6	55
81	Models and Algorithms for the Integrated Planning of Bin Allocation and Vehicle Routing in Solid Waste Management. *Transportation Science*, **2014**, 48, 103-120	4.4	54
80	Metaheuristics for the vehicle routing problem with loading constraints. *Networks*, **2007**, 49, 294-307	1.6	52
79	A MAX-MIN ant system for unconstrained multi-level lot-sizing problems. *Computers and Operations Research*, **2007**, 34, 2533-2552	4.6	51
78	Hybridization of very large neighborhood search for ready-mixed concrete delivery problems. *Computers and Operations Research*, **2010**, 37, 559-574	4.6	48
77	A Hybrid Solution Approach for Ready-Mixed Concrete Delivery. *Transportation Science*, **2009**, 43, 70-85	4.4	41
76	A Cooperative and Adaptive Variable Neighborhood Search for the Multi Depot Vehicle Routing Problem with Time Windows. *Business Research*, **2008**, 1, 207-218	3.8	38

75	Variable neighborhood search for the stochastic and dynamic vehicle routing problem. *Annals of Operations Research*, **2016**, 236, 425-461	3.2	37
74	The school bus routing and scheduling problem with transfers. *Networks*, **2015**, 65, 180-203	1.6	36
73	PARALLEL COOPERATIVE SAVINGS BASED ANT COLONY OPTIMIZATION ⎯ MULTIPLE SEARCH AND DECOMPOSITION APPROACHES. *Parallel Processing Letters*, **2006**, 16, 351-369	0.3	36
72	Heuristic and exact algorithms for the multi-pile vehicle routing problem. *OR Spectrum*, **2011**, 33, 931-959	2.9	35
71	Water distribution in disaster relief. *International Journal of Physical Distribution and Logistics Management*, **2010**, 40, 693-708	5.2	34
70	A Bi-objective Metaheuristic for Disaster Relief Operation Planning. *Studies in Computational Intelligence*, **2010**, 167-187	0.8	34
69	Survey: Matheuristics for Rich Vehicle Routing Problems. *Lecture Notes in Computer Science*, **2010**, 206-221	1.9	29
68	Using Traffic Information for Time-Dependent Vehicle Routing. *Procedia, Social and Behavioral Sciences*, **2012**, 39, 217-229		27
67	Parallel Ant Systems for the Capacitated Vehicle Routing Problem. *Lecture Notes in Computer Science*, **2004**, 72-83	0.9	26
66	Combining population-based and exact methods for multi-level capacitated lot-sizing problems. *International Journal of Production Research*, **2006**, 44, 4755-4771	7.8	25
65	Insertion Based Ants for Vehicle Routing Problems with Backhauls and Time Windows. *Lecture Notes in Computer Science*, **2002**, 135-148	0.9	24
64	Ambulance location and relocation models in a crisis. *Central European Journal of Operations Research*, **2016**, 24, 1-27	2.2	23
63	Scheduling periodic customer visits for a traveling salesperson. *European Journal of Operational Research*, **2007**, 179, 823-837	5.6	23
62	Nature-inspired metaheuristics for multiobjective activity crashing. *Omega*, **2008**, 36, 1019-1037	7.2	21
61	SavingsAnts for the Vehicle Routing Problem. *Lecture Notes in Computer Science*, **2002**, 11-20	0.9	21
60	POPMUSIC for a real-world large-scale vehicle routing problem with time windows. *Journal of the Operational Research Society*, **2009**, 60, 934-943	2	19
59	Examination and Operating Room Scheduling Including Optimization of Intrahospital Routing. *Transportation Science*, **2014**, 48, 59-77	4.4	17
58	Extracting Test Sequences from a Markov Software Usage Model by ACO. *Lecture Notes in Computer Science*, **2003**, 2465-2476	0.9	17

57	Stochastic project management: multiple projects with multi-skilled human resources. *Journal of Scheduling*, **2019**, 22, 271-288	1.6	16
56	Solving routing problems with pairwise synchronization constraints. *Central European Journal of Operations Research*, **2018**, 26, 443-464	2.2	16
55	Chapter 7: Pickup-and-Delivery Problems for People Transportation **2014**, 193-212		16
54	A heuristic algorithm for the free newspaper delivery problem. *European Journal of Operational Research*, **2013**, 230, 245-257	5.6	16
53	Solving a Bi-objective Flowshop Scheduling Problem by Pareto-Ant Colony Optimization. *Lecture Notes in Computer Science*, **2006**, 294-305	0.9	15
52	Analyzing a Unified Ant System for the VRP and Some of Its Variants. *Lecture Notes in Computer Science*, **2003**, 300-310	0.9	15
51	Cooperative Ant Colonies for Optimizing Resource Allocation in Transportation. *Lecture Notes in Computer Science*, **2001**, 70-79	0.9	15
50	Health Care Logistics, Emergency Preparedness, and Disaster Relief: New Challenges for Routing Problems with a Focus on the Austrian Situation. *Operations Research/ Computer Science Interfaces Series*, **2008**, 527-550	0.3	14
49	Adaptive large neighborhood search for the vehicle routing problem with synchronization constraints at the delivery location. *Networks*, **2020**, 75, 64-85	1.6	14
48	Applying Ant Colony Optimization to the Capacitated Arc Routing Problem. *Lecture Notes in Computer Science*, **2004**, 420-421	0.9	13
47	A matheuristic for a multimodal long haul routing problem. *EURO Journal on Transportation and Logistics*, **2019**, 8, 397-433	2.4	13
46	A Population-Based Local Search for Solving a Bi-objective Vehicle Routing Problem. *Lecture Notes in Computer Science*, **2007**, 166-175	0.9	12
45	Special issue on ant colony optimization. *Swarm Intelligence*, **2009**, 3, 1-2	3	11
44	Solving a Bi-objective Vehicle Routing Problem by Pareto-Ant Colony Optimization **2007**, 187-191		11
43	Disruption management for the Viennese public transport provider. *Public Transport*, **2016**, 8, 161-183	2.1	11
42	Scheduling of maintenance work of a large-scale tramway network. *European Journal of Operational Research*, **2018**, 270, 1158-1170	5.6	9
41	The vehicle routing problem with arrival time diversification on a multigraph. *European Journal of Operational Research*, **2020**, 286, 564-575	5.6	8
40	Enriched workflow modelling and Stochastic Branch-and-Bound. *European Journal of Operational Research*, **2006**, 175, 1798-1817	5.6	8

39	Representation and optimization of software usage models with non-Markovian state transitions. *Information and Software Technology*, **2000**, 42, 873-887	3.4	8
38	Local Search Guided by Path Relinking and Heuristic Bounds **2007**, 501-515		7
37	Finding the trade-off between emissions and disturbance in an urban context. *Flexible Services and Manufacturing Journal*, **2018**, 30, 554-591	1.8	7
36	The vehicle routing problem with heterogeneous locker boxes. *Central European Journal of Operations Research*, **2021**, 29, 113-142	2.2	7
35	Scheduling recurring radiotherapy appointments in an ion beam facility. *Journal of Scheduling*, **2019**, 22, 137-154	1.6	6
34	A unified framework for routing problems with a fixed fleet size. *International Journal of Metaheuristics*, **2017**, 6, 160	0.8	6
33	On Index Structures in Hybrid Metaheuristics for Routing Problems with Hard Feasibility Checks: An Application to the 2-Dimensional Loading Vehicle Routing Problem. *Lecture Notes in Computer Science*, **2010**, 160-173	0.9	6
32	A Variable Neighborhood Search Integrated in the POPMUSIC Framework for Solving Large Scale Vehicle Routing Problems. *Lecture Notes in Computer Science*, **2008**, 29-42	0.9	6
31	A machine learning approach for flow shop scheduling problems with alternative resources, sequence-dependent setup times, and blocking. *OR Spectrum*, **2019**, 41, 871-893	1.9	6
30	Multi-objective simulation optimization for complex urban mass rapid transit systems. *Annals of Operations Research*, **2019**, 305, 449	3.2	5
29	Variable Neighborhood Search for the Time-Dependent Vehicle Routing Problem with Soft Time Windows. *Lecture Notes in Computer Science*, **2011**, 61-75	0.9	5
28	Reviewer Assignment for Scientific Articles using Memetic Algorithms **2007**, 113-134		5
27	Secure and efficient routing on nodes, edges, and arcs of simple-graphs and of multi-graphs. *Networks*, **2020**, 76, 431-450	1.6	4
26	Population-based simulation optimization for urban mass rapid transit networks. *Flexible Services and Manufacturing Journal*, **2020**, 32, 767-805	1.8	4
25	Biased random-key genetic algorithm for cobot assignment in an assembly/disassembly job shop scheduling problem. *Procedia Computer Science*, **2021**, 180, 328-337	1.6	4
24	A Multi-encoded Genetic Algorithm Approach to Scheduling Recurring Radiotherapy Treatment Activities with Alternative Resources, Optional Activities, and Time Window Constraints. *Lecture Notes in Computer Science*, **2018**, 373-382	0.9	3
23	Addendum to Heuristics for the multi-period orienteering problem with multiple time windows *Computers and Operations Research*, **2013**, 40, 1516-1519	4.6	3
22	A discrete event simulation model of the Viennese subway system for decision support and strategic planning **2016**,		3

21	Metaheuristic search techniques for multi-objective and stochastic problems: a history of the inventions of Walter J. Gutjahr in the past 22 years. *Central European Journal of Operations Research*, **2018**, 26, 331-356	2.2	2
20	Demand Responsive Transportation **2011**,		2
19	Models for intra-hospital patient routing **2011**,		2
18	High Performance Computing in the Optimization of Software Test Plans. *Optimization and Engineering*, **2002**, 3, 67-87	2.1	2
17	A Large Neighbourhood Search Metaheuristic for the Contagious Disease Testing Problem. *European Journal of Operational Research*, **2021**,	5.6	2
16	Stochastic Local Search Procedures for the Probabilistic Two-Day Vehicle Routing Problem. *Studies in Computational Intelligence*, **2008**, 153-168	0.8	2
15	Heuristics for a Real-World Mail Delivery Problem. *Lecture Notes in Computer Science*, **2011**, 481-490	0.9	2
14	Matheuristic search techniques for the consistent inventory routing problem with time windows and split deliveries. *Operations Research Perspectives*, **2020**, 7, 100152	2.1	2
13	SIMULATION-BASED HEADWAY OPTIMIZATION FOR A SUBWAY NETWORK: A PERFORMANCE COMPARISON OF POPULATION-BASED ALGORITHMS **2018**,		2
12	VRP with Interdependent Time Windows A Case Study for the Austrian Red Cross Blood Program **2003**, 156-161		1
11	Hybrid Metaheuristics for Project Scheduling and Staffing, Considering Project Interruptions and Labor Contracts. *Dynamic Modeling and Econometrics in Economics and Finance*, **2016**, 349-377		1
10	Preface: The modeling and simulation of complex systems. *Annals of Operations Research*, **2021**, 305, 423-424	3.2	1
9	Consistent Inventory Routing with Split Deliveries. *Operations Research Proceedings: Papers of the Annual Meeting = Vorträge Der Jahrestagung / DGOR*, **2018**, 395-401	0.1	0
8	The pickup and delivery problem with alternative locations and overlapping time windows. *Computers and Operations Research*, **2022**, 143, 105758	4.6	0
7	Twenty Years of Vehicle Routing in Vienna. *Dynamic Modeling and Econometrics in Economics and Finance*, **2016**, 491-520		
6	Comments on: Disruption management in vehicle routing and scheduling for road freight transport: a review. *Top*, **2018**, 26, 21-24	1.3	
5	. *Computers and Operations Research*, **2008**, 35, 2709-2710	4.6	
4	Solving a Rich Intra-facility Steel Slab Routing Problem. *Operations Research Proceedings: Papers of the Annual Meeting = Vorträge Der Jahrestagung / DGOR*, **2018**, 313-319	0.1	

3 Stacking and transporting steel slabs using high-capacity vehicles. *Procedia Computer Science*, **2021**, 180, 843-851   1.6

2 Solving a Multi-objective Vehicle Routing Problem with Synchronization Constraints. *Lecture Notes in Computer Science*, **2021**, 532-546   0.9

1 A hybrid metaheuristic solution approach for the cobot assignment and job shop scheduling problem. *Journal of Industrial Information Integration*, **2022**, 28, 100350   7