David Pisinger

List of Publications by Citations

132 papers	8,724 citations	42 h-index	92 g-index
156 ext. papers	10,282 ext. citations	3.4 avg, IF	6.67 L-index

#	Paper	IF	Citations
132	Knapsack Problems **2004**,		1265
131	An Adaptive Large Neighborhood Search Heuristic for the Pickup and Delivery Problem with Time Windows. *Transportation Science*, **2006**, 40, 455-472	4.4	1028
130	A general heuristic for vehicle routing problems. *Computers and Operations Research*, **2007**, 34, 2403-2435	3.6	757
129	The Three-Dimensional Bin Packing Problem. *Operations Research*, **2000**, 48, 256-267	2.3	367
128	A unified heuristic for a large class of Vehicle Routing Problems with Backhauls. *European Journal of Operational Research*, **2006**, 171, 750-775	5.6	270
127	Dynamic Programming and Strong Bounds for the 0-1 Knapsack Problem. *Management Science*, **1999**, 45, 414-424	3.9	247
126	Heuristics for the container loading problem. *European Journal of Operational Research*, **2002**, 141, 382-392	5.6	228
125	New trends in exact algorithms for the 0□1 knapsack problem. *European Journal of Operational Research*, **2000**, 123, 325-332	5.6	198
124	Where are the hard knapsack problems?. *Computers and Operations Research*, **2005**, 32, 2271-2284	4.6	193
123	Subset-Row Inequalities Applied to the Vehicle-Routing Problem with Time Windows. *Operations Research*, **2008**, 56, 497-511	2.3	187
122	Large Neighborhood Search. *Profiles in Operations Research*, **2010**, 399-419	1	165
121	A Minimal Algorithm for the 0-1 Knapsack Problem. *Operations Research*, **1997**, 45, 758-767	2.3	163
120	A Base Integer Programming Model and Benchmark Suite for Liner-Shipping Network Design. *Transportation Science*, **2014**, 48, 281-312	4.4	156
119	A minimal algorithm for the multiple-choice knapsack problem. *European Journal of Operational Research*, **1995**, 83, 394-410	5.6	152
118	The quadratic knapsack problem□ survey. *Discrete Applied Mathematics*, **2007**, 155, 623-648	1	132
117	Liner shipping hub network design in a competitive environment. *Transportation Research, Part E: Logistics and Transportation Review*, **2010**, 46, 991-1004	9	130
116	Guided Local Search for the Three-Dimensional Bin-Packing Problem. *INFORMS Journal on Computing*, **2003**, 15, 267-283	2.4	130

115	Exact Solution of the Quadratic Knapsack Problem. *INFORMS Journal on Computing*, **1999**, 11, 125-137	2.4	124
114	Using Decomposition Techniques and Constraint Programming for Solving the Two-Dimensional Bin-Packing Problem. *INFORMS Journal on Computing*, **2007**, 19, 36-51	2.4	111
113	The Vessel Schedule Recovery Problem (VSRP) – A MIP model for handling disruptions in liner shipping. *European Journal of Operational Research*, **2013**, 224, 362-374	5.6	108
112	An exact algorithm for large multiple knapsack problems. *European Journal of Operational Research* , **1999**, 114, 528-541	5.6	108
111	Approximation algorithms for knapsack problems with cardinality constraints. *European Journal of Operational Research*, **2000**, 123, 333-345	5.6	105
110	An adaptive large neighborhood search metaheuristic for the vehicle routing problem with drones. *Transportation Research Part C: Emerging Technologies*, **2019**, 102, 289-315	8.4	99
109	Fleet deployment, network design and hub location of liner shipping companies. *Transportation Research, Part E: Logistics and Transportation Review*, **2011**, 47, 947-964	9	96
108	An expanding-core algorithm for the exact 0–1 knapsack problem. *European Journal of Operational Research*, **1995**, 87, 175-187	5.6	96
107	A branch and cut algorithm for the container shipping network design problem. *Flexible Services and Manufacturing Journal*, **2012**, 24, 349-374	1.8	93
106	The two-dimensional bin packing problem with variable bin sizes and costs. *Discrete Optimization*, **2005**, 2, 154-167	1	93
105	Core Problems in Knapsack Algorithms. *Operations Research*, **1999**, 47, 570-575	2.3	93
104	Heuristic approaches for the two- and three-dimensional knapsack packing problem. *Computers and Operations Research*, **2009**, 36, 1026-1049	4.6	78
103	A service flow model for the liner shipping network design problem. *European Journal of Operational Research*, **2014**, 235, 378-386	5.6	60
102	The time constrained multi-commodity network flow problem and its application to liner shipping network design. *Transportation Research, Part E: Logistics and Transportation Review*, **2015**, 76, 122-138	9	60
101	Algorithm 864. *ACM Transactions on Mathematical Software*, **2007**, 33, 7	2.3	59
100	Introduction to NP-Completeness of Knapsack Problems **2004**, 483-493		58
99	Linear Time Algorithms for Knapsack Problems with Bounded Weights. *Journal of Algorithms*, **1999**, 33, 1-14		57
98	Upper bounds and exact algorithms for -dispersion problems. *Computers and Operations Research*, **2006**, 33, 1380-1398	4.6	54

97	Liner Shipping Cargo Allocation with Repositioning of Empty Containers. *Infor*, **2011**, 49, 109-124	0.5	52
96	A hybrid adaptive large neighborhood search heuristic for lot-sizing with setup times. *European Journal of Operational Research*, **2012**, 218, 614-623	5.6	49
95	Optimizing wind farm cable routing considering power losses. *European Journal of Operational Research*, **2018**, 270, 917-930	5.6	47
94	A matheuristic for the liner shipping network design problem. *Transportation Research, Part E: Logistics and Transportation Review*, **2014**, 72, 42-59	9	45
93	A dynamic programming approach for optimizing train speed profiles with speed restrictions and passage points. *Transportation Research Part B: Methodological*, **2017**, 99, 167-182	7.2	43
92	Solution of Large Quadratic Knapsack Problems Through Aggressive Reduction. *INFORMS Journal on Computing*, **2007**, 19, 280-290	2.4	43
91	Multidimensional Knapsack Problems **2004**, 235-283		43
90	Multi-objective and multi-constrained non-additive shortest path problems. *Computers and Operations Research*, **2011**, 38, 605-616	4.6	41
89	Scheduling Transportation of Live Animals to Avoid the Spread of Diseases. *Transportation Science*, **2004**, 38, 197-209	4.4	38
88	Knapsack Problems **1998**, 299-428		38
87	Synchronized dial-a-ride transportation of disabled passengers at airports. *European Journal of Operational Research*, **2013**, 225, 106-117	5.6	37
86	Heuristics for container loading of furniture. *European Journal of Operational Research*, **2010**, 200, 881-892	5.6	36
85	Single liner shipping service design. *Computers and Operations Research*, **2014**, 45, 1-6	4.6	35
84	Time constrained liner shipping network design. *Transportation Research, Part E: Logistics and Transportation Review*, **2017**, 105, 152-162	9	34
83	Optimizing the supply chain of biomass and biogas for a single plant considering mass and energy losses. *European Journal of Operational Research*, **2017**, 262, 744-758	5.6	33
82	The Multiple-Choice Knapsack Problem **2004**, 317-347		32
81	A Minimal Algorithm for the Bounded Knapsack Problem. *INFORMS Journal on Computing*, **2000**, 12, 75-82	2.4	31
80	The liner shipping berth scheduling problem with transit times. *Transportation Research, Part E: Logistics and Transportation Review*, **2016**, 86, 116-128	9	29

79	Erratum to "The Three-Dimensional Bin Packing Problem": Robot-Packable and Orthogonal Variants of Packing Problems. *Operations Research*, **2005**, 53, 735-736	2.3	29
78	Discrete location problems with push–pull objectives. *Discrete Applied Mathematics*, **2002**, 123, 363-378	1	29
77	Optimization in liner shipping. *4or*, **2017**, 15, 1-35	1.4	26
76	Budgeting with bounded multiple-choice constraints. *European Journal of Operational Research*, **2001**, 129, 471-480	5.6	26
75	Liner shipping network design. *European Journal of Operational Research*, **2020**, 286, 1-20	5.6	26
74	The load-balanced multi-dimensional bin-packing problem. *Computers and Operations Research*, **2016**, 74, 152-164	4.6	24
73	Dynamic Programming on the Word RAM. *Algorithmica*, **2003**, 35, 128-145	0.9	23
72	Competitive Liner Shipping Network Design. *Computers and Operations Research*, **2017**, 87, 125-136	4.6	22
71	Multi-dimensional bin packing problems with guillotine constraints. *Computers and Operations Research*, **2010**, 37, 1999-2006	4.6	20
70	A Branch-and-Price algorithm for railway rolling stock rescheduling. *Transportation Research Part B: Methodological*, **2017**, 99, 228-250	7.2	17
69	A branch-and-cut algorithm for the capacitated profitable tour problem. *Discrete Optimization*, **2014**, 14, 78-96	1	17
68	Big Data Optimization in Maritime Logistics. *Studies in Big Data*, **2016**, 319-344	0.9	16
67	Simple but efficient approaches for the collapsing knapsack problem. *Discrete Applied Mathematics*, **1997**, 77, 271-280	1	16
66	A combined stochastic programming and optimal control approach to personal finance and pensions. *OR Spectrum*, **2015**, 37, 583-616	1.9	15
65	Bunker purchasing with contracts. *Maritime Economics and Logistics*, **2014**, 16, 418-435	2.6	15
64	Train shunting at a workshop area. *Flexible Services and Manufacturing Journal*, **2011**, 23, 156-180	1.8	15
63	Two- and three-index formulations of the minimum cost multicommodity k-splittable flow problem. *European Journal of Operational Research*, **2010**, 202, 82-89	5.6	15
62	A fast algorithm for strongly correlated knapsack problems. *Discrete Applied Mathematics*, **1998**, 89, 197-212	1	15

61	Speed optimizations for liner networks with business constraints. *European Journal of Operational Research*, **2020**, 285, 1127-1140	5.6	15
60	Optimal wind farm cable routing: Modeling branches and offshore transformer modules. *Networks*, **2018**, 72, 42-59	1.6	14
59	Chvtal-Gomory Rank-1 Cuts Used in a Dantzig-Wolfe Decomposition of the Vehicle Routing Problem with Time Windows. *Operations Research/ Computer Science Interfaces Series*, **2008**, 397-419	0.3	14
58	Some thoughts on combinatorial optimisation. *European Journal of Operational Research*, **1995**, 83, 253-270	5.6	14
57	Mixed Integer Linear Programming for new trends in wind farm cable routing. *Electronic Notes in Discrete Mathematics*, **2018**, 64, 115-124	0.3	13
56	Solving the Liner Shipping Fleet Repositioning Problem with Cargo Flows. *Transportation Science*, **2015**, 49, 652-674	4.4	13
55	Guided Local Search for Final Placement in VLSI Design. *Journal of Heuristics*, **2003**, 9, 269-295	1.9	13
54	Mathematical Optimization and Algorithms for Offshore Wind Farm Design: An Overview. *Business and Information Systems Engineering*, **2019**, 61, 469-485	3.8	13
53	Modeling and solving the multimodal car- and ride-sharing problem. *European Journal of Operational Research*, **2021**, 293, 290-303	5.6	13
52	Interactive Cost Configuration Over Decision Diagrams. *Journal of Artificial Intelligence Research*,37, 99-139	1.9	12
51	A flow-first route-next heuristic for liner shipping network design. *Networks*, **2018**, 72, 358-381	1.6	11
50	Simultaneous Optimization of Container Ship Sailing Speed and Container Routing with Transit Time Restrictions. *Transportation Science*, **2018**, 52, 769-787	4.4	11
49	Large Neighborhood Search. *Profiles in Operations Research*, **2019**, 99-127	1	9
48	The Edge Set Cost of the Vehicle Routing Problem with Time Windows. *Transportation Science*, **2016**, 50, 694-707	4.4	7
47	An adaptive large neighbourhood search heuristic for routing and scheduling feeder vessels in multi-terminal ports. *European Journal of Operational Research*, **2020**, 287, 682-698	5.6	7
46	Solving Vehicle Routing with Full Container Load and Time Windows. *Lecture Notes in Computer Science*, **2012**, 120-128	0.9	7
45	Denser Packings Obtained inO(nlog logn) Time. *INFORMS Journal on Computing*, **2007**, 19, 395-405	2.4	7
44	A Matheuristic for the Liner Shipping Network Design Problem with Transit Time Restrictions. *Lecture Notes in Computer Science*, **2015**, 195-208	0.9	7

43	Optimization of the drayage problem using exact methods. *Infor*, **2016**, 54, 33-51	0.5	7
42	Optimal retirement planning with a focus on single and joint life annuities. *Quantitative Finance*, **2016**, 16, 275-295	1.6	6
41	A minimal algorithm for the Bounded Knapsack Problem. *Lecture Notes in Computer Science*, **1995**, 95-109	0.9	6
40	Inter-array cable routing optimization for big wind parks with obstacles **2016**,		6
39	Single string planning problem arising in liner shipping industries: A heuristic approach. *Computers and Operations Research*, **2013**, 40, 2357-2373	4.6	5
38	Variable neighborhood search for large offshore wind farm layout optimization. *Computers and Operations Research*, **2022**, 138, 105588	4.6	5
37	Understanding carsharing: A review of managerial practices towards relevant research insights. *Research in Transportation Business and Management*, **2021**, 41, 100653	2.8	5
36	Scheduling EURO-k conferences. *European Journal of Operational Research*, **2018**, 270, 1138-1147	5.6	5
35	A comparative study of time aggregation techniques in relation to power capacity expansion modeling. *Top*, **2019**, 27, 353-405	1.3	4
34	Tolerance analysis for 0[1] knapsack problems. *European Journal of Operational Research*, **2017**, 258, 866-876	3.8	4
33	Separation and Extension of Cover Inequalities for Conic Quadratic Knapsack Constraints with Generalized Upper Bounds. *INFORMS Journal on Computing*, **2013**, 25, 420-431	2.4	4
32	Multiple Knapsack Problems **2004**, 285-316		4
31	Other Knapsack Problems **2004**, 389-424		4
30	On the Impact of using Mixed Integer Programming Techniques on Real-world Offshore Wind Parks **2017**,		4
29	Railway capacity and expansion analysis using time discretized paths. *Flexible Services and Manufacturing Journal*, **2018**, 30, 712-739	1.8	4
28	Optimization in liner shipping. *Annals of Operations Research*, **2018**, 271, 205-236	3.2	4
27	Green Liner Shipping Network Design **2019**, 307-337		3
26	Vattenfall Optimizes Offshore Wind Farm Design. *Interfaces*, **2020**, 50, 80-94	0.7	3

25	Logistics in supply chains (Part 2). *Flexible Services and Manufacturing Journal*, **2012**, 24, 1-3	1.8	3
24	Optimal annuity portfolio under inflation risk. *Computational Management Science*, **2015**, 12, 461-488	1	3
23	Scheduling of outbound luggage handling at airports. *Operations Research Proceedings: Papers of the Annual Meeting = Vortrge Der Jahrestagung / DGOR*, **2012**, 251-256	0.1	3
22			3
21	The multi-commodity network flow problem with soft transit time constraints: Application to liner shipping. *Transportation Research, Part E: Logistics and Transportation Review*, **2021**, 150, 102342	9	3
20	Bunker Purchasing in Liner Shipping. *Profiles in Operations Research*, **2015**, 251-278	1	2
19	Sensitivity analysis of time aggregation techniques applied to capacity expansion energy system models. *Applied Energy*, **2020**, 269, 114938	10.7	2
18	Integrated job scheduling and network routing. *Networks*, **2013**, 61, 248-262	1.6	2
17	The off-line group seat reservation problem. *European Journal of Operational Research*, **2010**, 207, 1244-1253	5.2	2
16	The Unbounded Knapsack Problem **2004**, 211-234		2
15	An optimization approach for a complex real-life container loading problem. *Omega*, **2022**, 107, 102559	7.2	2
14	On the Impact of Considering Power Losses in Offshore Wind Farm Cable Routing. *Communications in Computer and Information Science*, **2018**, 267-292	0.3	2
13	Constraint Programming and Local Search Heuristic: a Matheuristic Approach for Routing and Scheduling Feeder Vessels in Multi-terminal Ports. *SN Operations Research Forum*, **2020**, 1, 1	0.5	2
12	The Baggage Belt Assignment Problem. *EURO Journal on Transportation and Logistics*, **2021**, 10, 100041	2.4	2
11	Finding a Portfolio of Near-Optimal Aggregated Solutions to Capacity Expansion Energy System Models. *SN Operations Research Forum*, **2020**, 1, 1	0.5	1
10	Upper Bounds on the Covering Number of Galois-Planes with Small Order. *Journal of Heuristics*, **2001**, 7, 59-76	1.9	1
9	Avoiding anomalies in the mt2 algorithm by Martello and Toth. *European Journal of Operational Research*, **1995**, 82, 206-208	5.6	1
8	Capacity Analysis of Freight Transport with Application to the Danish and Southern Swedish Railway. *Lecture Notes in Computer Science*, **2015**, 627-647	0.9	1

7	Baggage Carousel Assignment at Airports: Model and Case Study. *SN Operations Research Forum*, **2021**, 2, 1	0.5	1
6	Optimal wafer cutting in shuttle layout problems. *Journal of Combinatorial Optimization*, **2011**, 22, 202-216	0.9	0
5	The transit time constrained fixed charge multi-commodity network design problem. *Computers and Operations Research*, **2021**, 136, 105511	4.6	0
4	Multi-scale optimization of the design of offshore wind farms. *Applied Energy*, **2022**, 314, 118830	10.7	0
3	Rejoinder on: A comparative study of time aggregation techniques in relation to power capacity-expansion modeling. *Top*, **2019**, 27, 421-425	1.3	
2	Reducing disease spread through optimization: Limiting mixture of the population is more important than limiting group sizes. *Computers and Operations Research*, **2022**, 105718	4.6	
1	Optimization of Transfer Baggage Handling in a Major Transit Airport. *SN Operations Research Forum*, **2021**, 2, 1	0.5	