Rainer Kolisch

List of Publications by Year
in descending order

79 papers	5,944 citations	159525 30 h-index	85498 71 g-index
87 all docs	87 docs citations	87 times ranked	2206 citing authors

#	Article	IF	Citations
1	PSPLIB - A project scheduling problem library. European Journal of Operational Research, 1997, 96, 205-216.	3.5	978
2	Experimental investigation of heuristics for resource-constrained project scheduling: An update. European Journal of Operational Research, 2006, 174, 23-37.	3.5	622
3	Serial and parallel resource-constrained project scheduling methods revisited: Theory and computation. European Journal of Operational Research, 1996, 90, 320-333.	3.5	577
4	Characterization and Generation of a General Class of Resource-Constrained Project Scheduling Problems. Management Science, 1995, 41, 1693-1703.	2.4	515
5	Experimental evaluation of state-of-the-art heuristics for the resource-constrained project scheduling problem. European Journal of Operational Research, 2000, 127, 394-407.	3.5	399
6	Heuristic Algorithms for the Resource-Constrained Project Scheduling Problem: Classification and Computational Analysis. Profiles in Operations Research, 1999, , 147-178.	0.3	233
7	Efficient priority rules for the resource-constrained project scheduling problem. Journal of Operations Management, 1996, 14, 179-192.	3.3	227
8	Semi-active, active, and non-delay schedules for the resource-constrained project scheduling problem. European Journal of Operational Research, 1995, 80, 94-102.	3.5	186
9	Scheduling and staffing multiple projects with a multi-skilled workforce. OR Spectrum, 2010, 32, 343-368.	2.1	151
10	Local search for nonpreemptive multi-mode resource-constrained project scheduling. IIE Transactions, 1997, 29, 987-999.	2.1	139
11	Project Scheduling under Resource Constraints. , 1995, , .		133
12	Adaptive search for solving hard project scheduling problems. Naval Research Logistics, 1996, 43, 23-40.	1.4	115
13	Master surgery scheduling with consideration of multiple downstream units. European Journal of Operational Research, 2014, 239, 227-236.	3.5	110
14	Flexible shift scheduling of physicians. Health Care Management Science, 2009, 12, 285-305.	1.5	96
15	MIP models for resource-constrained project scheduling with flexible resource profiles. European Journal of Operational Research, 2014, 239, 335-348.	3.5	89
16	Providing radiology health care services to stochastic demand of different customer classes. OR Spectrum, 2008, 30, 375-395.	2.1	84
17	Project Scheduling Under Partially Renewable Resource Constraints. Management Science, 1999, 45, 543-559.	2.4	75
18	Work assignment to and qualification of multi-skilled human resources under knowledge depreciation and company skill level targets. International Journal of Production Research, 2010, 48, 3759-3781.	4.9	70

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19	Approximate dynamic programming for capacity allocation in the service industry. European Journal of Operational Research, 2012, 218, 239-250.	3.5	70
20	Benchmark Instances for Project Scheduling Problems. Profiles in Operations Research, 1999, , 197-212.	0.3	67
21	Scheduling the hospital-wide flow of elective patients. European Journal of Operational Research, 2014, 233, 689-699.	3.5	65
22	Local search for nonpreemptive multi-mode resource-constrained project scheduling. IIE Transactions, 1997, 29, 987-999.	2.1	64
23	Midterm scheduling of physicians with flexible shifts using branch and price. IIE Transactions, 2010, 43, 84-109.	2.1	59
24	Integration of assembly and fabrication for make-to-order production. International Journal of Production Economics, 2000, 68, 287-306.	5.1	49
25	An estimation of distribution algorithm and new computational results for the stochastic resource-constrained project scheduling problem. Flexible Services and Manufacturing Journal, 2015, 27, 585-605.	1.9	48
26	The performance of a generalized Baileyâ€“Welch rule for outpatient appointment scheduling under inpatient and emergency demand. Health Care Management Science, 2009, 12, 408-419.	1.5	47
27	A hybrid metaheuristic for resource-constrained project scheduling with flexible resource profiles. European Journal of Operational Research, 2017, 262, 262-273.	3.5	42
28	Planning towing processes at airports more efficiently. Transportation Research, Part E: Logistics and Transportation Review, 2014, 70, 293-304.	3.7	40
29	Resource Allocation Capabilities of Commercial Project Management Software Packages. Interfaces, 1999, 29, 19-31.	1.6	37
30	Efficient methods for scheduling make-to-order assemblies under resource, assembly area and part availability constraints. International Journal of Production Research, 2000, 38, 207-228.	4.9	36
31	Machine Learning Approaches for Early DRG Classification and Resource Allocation. INFORMS Journal on Computing, 2015, 27, 718-734.	1.0	34
32	Capacity allocation for demand of different customer-product-combinations with cancellations, no-shows, and overbooking when there is a sequential delivery of service. Annals of Operations Research, 2013, 206, 401-423.	2.6	33
33	Overutilization and underutilization of operating rooms - insights from behavioral health care operations management. Health Care Management Science, 2017, 20, 115-128.	1.5	33
34	Integrated scheduling, assembly area- and part-assignment for large-scale, make-to-order assemblies. International Journal of Production Economics, 2000, 64, 127-141.	5.1	31
35	Column generation for vehicle routing problems with multiple synchronization constraints. European Journal of Operational Research, 2019, 272, 699-711.	3.5	30
36	An efficient metaheuristic for integrated scheduling and staffing IT projects based on a generalized minimum cost flow network. Naval Research Logistics, 2012, 59, 111-127.	1.4	27

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37	On the assessment of costs in a newsvendor environment: Insights from an experimental study. Omega, 2014, 43, 1-8.	3.6	24
38	Human Behavior in Project Portfolio Selection: Insights from an Experimental Study. Decision Sciences, 2018, 49, 1061-1087.	3.2	23
39	Dynamic order acceptance and capacity planning in a stochastic multi-project environment with a bottleneck resource. International Journal of Production Research, 2018, 56, 459-475.	4.9	20
40	The dynamic replica placement problem with service levels in content delivery networks: a model and a simulated annealing heuristic. OR Spectrum, 2015, 37, 217-242.	2.1	15
41	Implementation of revenue management in the process industry of North America and Europe. Journal of Revenue and Pricing Management, 2012, 11, 191-209.	0.7	13
42	Improving Intensive Care Unit and Ward Utilization by Adapting Master Surgery Schedules. A & A Case Reports, 2016, 6, 172-180.	0.7	13
43	Optimizing Inbound Baggage Handling at Airports. Transportation Science, 2017, 51, 1210-1225.	2.6	13
44	Hierarchical Multiâ€skill Resource Assignment in the Telecommunications Industry. Production and Operations Management, 2014, 23, 489-503.	2.1	12
45	Maximizing R&D Portfolio Value. Research Technology Management, 2005, 48, 33-39.	0.6	11
46	Scheduling medical residentsâ€™ training at university hospitals. European Journal of Operational Research, 2019, 274, 253-266.	3.5	11
47	Runway scheduling during winter operations. Omega, 2021, 102, 102325.	3.6	11
48	Stand und Perspektiven des Einsatzes von Revenue Management in der Prozessindustrie. Zeitschrift FÃ¼r Planung Und Unternehmenssteuerung, 2009, 20, 197-214.	0.3	10
49	Strategic planning of new product introductions: Integrated planning of products and modules in the automotive industry. Omega, 2021, 105, 102515.	3.6	10
50	Numetrix/3 Production Scheduling. OR Spectrum, 2000, 22, 307-312.	2.1	9
51	Obtaining the optimal fleet mix: A case study about towing tractors at airports. Omega, 2016, 64, 102-114.	3.6	9
52	Column Generation for Outbound Baggage Handling at Airports. Transportation Science, 2017, 51, 1226-1241.	2.6	9
53	Profit impact of revenue management in the process industry. Journal of Revenue and Pricing Management, 2014, 13, 483-507.	0.7	8
54	The impact of flexibility on engineer-to-order production planning. International Journal of Production Economics, 2021, 239, 108183.	5.1	8

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55	Project management and scheduling. Flexible Services and Manufacturing Journal, 2013, 25, 1-5.	1.9	6
56	The resource-constrained project scheduling model of Bianco and Caramia: clarifications and an alternative model formulation. Flexible Services and Manufacturing Journal, 2014, 26, 454-459.	1.9	6
57	Shifts, Types, and Generation Schemes for Project Schedules. , 2015, , 3-16.		6
58	Hospital-wide therapist scheduling and routing: Exact and heuristic methods. IISE Transactions on Healthcare Systems Engineering, 2018, 8, 268-279.	1.2	6
59	The impact of medical documentation assistants on process performance measures in a surgical emergency department. European Journal of Medical Research, 2019, 24, 31.	0.9	6
60	Selection and Scheduling of Pharmaceutical Research Projects. , 2006, , 321-344.		6
61	Capacity Allocation for Demand of Different Customer-Product-Combinations with Cancellation, No-Shows, and Overbooking When There is a Sequential Delivery of Service. SSRN Electronic Journal, 2010, , .	0.4	5
62	Health care operations management. OR Spectrum, 2012, 34, 315-317.	2.1	5
63	Maximization of Open Hospital Capacity under Shortage of SARS-CoV-2 Vaccinesâ€"An Open Access, Stochastic Simulation Tool. Vaccines, 2021, 9, 546.	2.1	5
64	Workforce capacity planning with hierarchical skills, long-term training, and random resignations. International Journal of Production Research, 2022, 60, 783-807.	4.9	5
65	Solving the time-discrete winter runway scheduling problem: A column generation and constraint programming approach. European Journal of Operational Research, 2022, 299, 674-689.	3.5	4
66	Exact Branch-Price-and-Cut for a Hospital Therapist Scheduling Problem with Flexible Service Locations and Time-Dependent Location Capacity. INFORMS Journal on Computing, 2022, 34, 1157-1175.	1.0	4
67	Scheduling of Multiple R&D{Projects in a Dynamic and Stochastic Environment. , 2009, , 135-140.		3
68	Should We All Work in Sprints? How Agile Project Management Improves Performance. Manufacturing and Service Operations Management, 2022, 24, 2293-2309.	2.3	3
69	Adaptive search for solving hard project scheduling problems. , 1996, 43, 23.		2
70	A Decision Support System for Planning Portfolios of Supply Chain Improvement Projects in the Semiconductor Industry. Adaptation, Learning, and Optimization, 2022, , 193-212.	0.5	2
71	Dynamic gate configurations at airports: A network optimization approach. European Journal of Operational Research, 2022, 301, 1133-1148.	3.5	2
72	Consistent vehicle routing with pickup decisions - Insights from sport academy training transfers. European Journal of Operational Research, 2022, 298, 337-350.	3.5	1

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73	Mathematical programming for nominating exchange students for international universities: The impact of stakeholdersâ€™ objectives and fairness constraints on allocations. Socio-Economic Planning Sciences, 2021, 76, 100974.	2.5	1
74	Editorial â€œProject Management and Schedulingâ€• OR Spectrum, 2016, 38, 279-281.	2.1	0
75	Projektscheduling. , 2018, , 609-645.		0
76	Algorithmic Economics und Operations Research. , 2017, , 129-139.		0
77	Just-in-Time Production of Large Assemblies Using Project Scheduling Models and Methods. , 2006, , 211-224.		0
78	A Data-Driven Approach for Baggage Handling Operations at Airports. Transportation Science, 2022, 56, 1179-1195.	2.6	0
79	Valuation of hospital resources: an optimization approach using clearing functions. IISE Transactions on Healthcare Systems Engineering, 0, , 1-18.	1.2	0