Mikhail Y Kovalyov

List of Publications by Year
in descending order

164	5,175	136940	95259
papers	citations	32 h-index	68 g-index

170	170	170	2143
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A survey of scheduling problems with setup times or costs. European Journal of Operational Research, 2008, 187, 985-1032.	5.7	1,076
2	Scheduling with batching: A review. European Journal of Operational Research, 2000, 120, 228-249.	5.7	803
3	Scheduling a batching machine. Journal of Scheduling, 1998, 1, 31-54.	1.9	360
4	Fixed interval scheduling: Models, applications, computational complexity and algorithms. European Journal of Operational Research, 2007, 178, 331-342.	5.7	141
5	Single machine scheduling with batch deliveries. European Journal of Operational Research, 1996, 94, 277-283.	5.7	114
6	Single machine scheduling subject to deadlines and resource dependent processing times. European Journal of Operational Research, 1996, 94, 284-291.	5.7	98
7	Minimizing the total weighted completion time of deteriorating jobs. Information Processing Letters, 2002, 81, 81-84.	0.6	89
8	Bicriterion Single Machine Scheduling with Resource Dependent Processing Times. SIAM Journal on Optimization, 1998, 8, 617-630.	2.0	80
9	A Fully Polynomial Approximation Scheme for Minimizing Makespan of Deteriorating Jobs. Journal of Heuristics, 1998, 3, 287-297.	1.4	74
10	A bibliography of non-deterministic lot-sizing models. International Journal of Production Research, 2014, 52, 2293-2310.	7.5	74
11	A Fully Polynomial Approximation Scheme for the Weighted Earlinessâ€“Tardiness Problem. Operations Research, 1999, 47, 757-761.	1.9	73
12	Single machine scheduling with a variable common due date and resource-dependent processing times. Computers and Operations Research, 2003, 30, 1173-1185.	4.0	65
13	Batching work and rework processes with limited deterioration of reworkables. Computers and Operations Research, 2006, 33, 1595-1605.	4.0	61
14	Scheduling Malleable Tasks on Parallel Processors to Minimize the Makespan. Annals of Operations Research, 2004, 129, 65-80.	4.1	58
15	Single machine batch scheduling to minimize the weighted number of late jobs. Mathematical Methods of Operations Research, 1996, 43, 1-8.	1.0	55
16	Scheduling jobs with piecewise linear decreasing processing times. Naval Research Logistics, 2003, 50, 531-554.	2.2	53
17	Workforce reconfiguration strategies in manufacturing systems: a state of the art. International Journal of Production Research, 2021, 59, 6721-6744.	7.5	50
18	Single machine batch scheduling with resource dependent setup and processing times. European Journal of Operational Research, 2001, 135, 177-183.	5.7	49

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19	Group Scheduling with Controllable Setup and Processing Times: Minimizing Total Weighted Completion Time. Annals of Operations Research, 2005, 133, 163-174.	4.1	48
20	Preemptable malleable task scheduling problem. IEEE Transactions on Computers, 2006, 55, 486-490.	3.4	44
21	Improving the complexities of approximation algorithms for optimization problems. Operations Research Letters, 1995, 17, 85-87.	0.7	39
22	An FPTAS for a single-item capacitated economic lot-sizing problem with monotone cost structure. Mathematical Programming, 2006, 106, 453-466.	2.4	39
23	Optimal workforce assignment to operations of a paced assembly line. European Journal of Operational Research, 2018, 264, 200-211.	5.7	39
24	â€œProduct Partitionâ€•and related problems of scheduling and systems reliability: Computational complexity and approximation. European Journal of Operational Research, 2010, 207, 601-604.	5.7	38
25	Single machine batch scheduling with deadlines and resource dependent processing times. Operations Research Letters, 1995, 17, 243-249.	0.7	37
26	Parallel-Machine Batching and Scheduling to Minimize Total Completion Time. IIE Transactions, 1996, 28, 953-956.	2.1	37
27	Single Machine Scheduling to Minimize Batch Delivery and Job Earliness Penalties. SIAM Journal on Optimization, 1997, 7, 547-559.	2.0	36
28	Soft Due Window Assignment and Scheduling on Parallel Machines. IEEE Transactions on Systems, Man and Cybernetics, Part A: Systems and Humans, 2007, 37, 614-620.	2.9	36
29	Positive half-products and scheduling with controllable processing times. European Journal of Operational Research, 2005, 165, 416-422.	5.7	35
30	Cost minimizing scheduling of work and rework processes on a single facility under deterioration of reworkables. International Journal of Production Economics, 2007, 105, 345-356.	8.9	34
31	Two-agent scheduling with agent specific batches on an unbounded serial batching machine. Journal of Scheduling, 2015, 18, 423-434.	1.9	34
32	Combinatorial design of a minimum cost transfer line. Omega, 2012, 40, 31-41.	5.9	33
33	An FPTAS for scheduling a two-machine flowshop with one unavailability interval. Naval Research Logistics, 2004, 51, 307-315.	2.2	32
34	Single machine group scheduling with resource dependent setup and processing times. European Journal of Operational Research, 2005, 162, 112-121.	5.7	31
35	Batch scheduling with deadlines on parallel machines. Annals of Operations Research, 1998, 83, 23-40.	4.1	27
36	Parallel machine scheduling and common due window assignment with job independent earliness and tardiness costs. Information Sciences, 2013, 224, 109-117.	6.9	27

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37	Multi-product lot sizing and scheduling on unrelated parallel machines. IIE Transactions, 2010, 42, 514-524.	2.1	26
38	Fleet and charging infrastructure decisions for fast-charging city electric bus service. Computers and Operations Research, 2021, 135, 105449.	4.0	26
39	Batching in a two-stage flowshop with dedicated machines in the second stage. IIE Transactions, 2004, 36, 87-93.	2.1	25
40	Internet shopping optimization problem. International Journal of Applied Mathematics and Computer Science, 2010, 20, 385-390.	1.5	24
41	Minimizing the number of late jobs on a single machine under due date uncertainty. Journal of Scheduling, 2011, 14, 351-360.	1.9	24
42	Batch scheduling and common due-date assignment on a single machine. Discrete Applied Mathematics, 1996, 70, 231-245.	0.9	23
43	Scheduling in a contaminated area: A model and polynomial algorithms. European Journal of Operational Research, 2006, 173, 125-132.	5.7	23
44	Batching and scheduling in a multi-machine flow shop. Journal of Scheduling, 2007, 10, 353-364.	1.9	22
45	Fast fully polynomial approximation schemes for minimizing completion time variance. European Journal of Operational Research, 2002, 137, 303-309.	5.7	21
46	Title is missing!. Journal of Heuristics, 2002, 8, 415-428.	1.4	21
47	Scheduling with controllable release dates and processing times: Makespan minimization. European Journal of Operational Research, 2006, 175, 751-768.	5.7	21
48	Internet shopping with price sensitive discounts. 4or, 2014, 12, 35-48.	1.6	21
49	Integrated production scheduling and batch delivery with fixed departure times and inventory holding costs. International Journal of Production Research, 2017, 55, 6193-6206.	7.5	21
50	Single machine batch scheduling with jointly compressible setup and processing times. European Journal of Operational Research, 2004, 153, 211-219.	5.7	20
51	Batching decisions for assembly production systems. European Journal of Operational Research, 2004, 157, 620-642.	5.7	20
52	Batch scheduling of step deteriorating jobs. Journal of Scheduling, 2008, 11, 17-28.	1.9	19
53	Minimizing the number of workers in a paced mixed-model assembly line. European Journal of Operational Research, 2019, 272, 188-194.	5.7	19
54	Complexity of Buffer Capacity Allocation Problems for Production Lines with Unreliable Machines. Mathematical Modelling and Algorithms, 2013, 12, 155-165.	0.5	18

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55	Job Sequencing with Exponential Functions of Processing Times. Informatica, 2006, 17, 13-24.	2.7	18
56	Single Machine Group Scheduling with Two Ordered Criteria. Journal of the Operational Research Society, 1996, 47, 315-320.	3.4	17
57	Single Supplier Scheduling for Multiple Deliveries. Annals of Operations Research, 2001, 107, 51-63.	4.1	17
58	The complexity of two group scheduling problems. Journal of Scheduling, 2002, 5, 477-485.	1.9	17
59	Scheduling with controllable release dates and processing times: Total completion time minimization. European Journal of Operational Research, 2006, 175, 769-781.	5.7	17
60	Soft due window assignment and scheduling of unit-time jobs on parallel machines. 4or, 2012, 10, 347-360.	1.6	17
61	A polynomial approximation scheme for problem F2/rj/Cmax. Operations Research Letters, 1997, 20, 75-79.	0.7	16
62	Single machine batch scheduling with sequential job processing. IIE Transactions, 2001, 33, 413-420.	2.1	16
63	Scheduling a Single Server in a Two-machine Flow Shop. Computing (Vienna/New York), 2003, 70, 167-180.	4.8	16
64	Batching deteriorating items with applications in computer communication and reverse logistics. European Journal of Operational Research, 2007, 182, 1002-1011.	5.7	16
65	Heuristic algorithms for lotsize scheduling with application in the tobacco industry. Computers and Industrial Engineering, 2001, 39, 235-253.	6.3	15
66	Parallel machine batching and scheduling with deadlines. Journal of Scheduling, 2000, 3, 109-123.	1.9	14
67	Batch scheduling of deteriorating reworkables. European Journal of Operational Research, 2008, 189, 1317-1326.	5.7	14
68	Minimizing setup costs in a transfer line design problem with sequential operation processing. International Journal of Production Economics, 2014, 151, 186-194.	8.9	14
69	Minimizing takeoff and landing risk in helicopter pickup and delivery operations. Omega, 2015, 55, 73-80.	5.9	14
70	Two faster algorithms for coordination of production and batch delivery: A note. European Journal of Operational Research, 2015, 241, 927-930.	5.7	14
71	Semi-V-shape property for two-machine no-wait proportionate flow shop problem with TADC criterion. International Journal of Production Research, 2019, 57, 560-566.	7.5	14
72	Uniform machine scheduling of unit-time jobs subject to resource constraints. Discrete Applied Mathematics, 1998, 84, 253-257.	0.9	13

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73	Complexity of parallel machine scheduling with processing-plus-wait due dates to minimize maximum absolute lateness. European Journal of Operational Research, 1999, 114, 403-410.	5.7	13
74	Maximization Problems in Single Machine Scheduling. Annals of Operations Research, 2004, 129, 21-32.	4.1	13
75	Optimal testing and repairing a failed series system. Journal of Combinatorial Optimization, 2006, 12, 279-295.	1.3	13
76	The EOQ problem with decidable warehouse capacity: Analysis, solution approaches and applications. Discrete Applied Mathematics, 2009, 157, 1806-1824.	0.9	13
77	A game mechanism for single machine sequencing with zero risk. Omega, 2014, 44, 104-110.	5.9	13
78	An overview of revenue management and dynamic pricing models in hotel business. RAIRO - Operations Research, 2018, 52, 119-141.	1.8	13
79	A Computational Analysis Of Balanced Jit Optimization Algorithms. Infor, 2001, 39, 299-316.	0.6	12
80	Batch scheduling with controllable setup and processing times to minimize total completion time. Journal of the Operational Research Society, 2003, 54, 499-506.	3.4	12
81	A graph-theoretic approach to interval scheduling on dedicated unrelated parallel machines. Journal of the Operational Research Society, 2014, 65, 1571-1579.	3.4	12
82	Scheduling for fabrication and assembly in a two-machine flowshop with a fixed job sequence. Annals of Operations Research, 2014, 217, 263-279.	4.1	12
83	A note on scheduling container storage operations of two nonâ€passing stacking cranes. Networks, 2018, 71, 271-280.	2.7	12
84	Two-Agent Scheduling on an Unbounded Serial Batching Machine. Lecture Notes in Computer Science, 2012, , 427-438.	1.3	12
85	An exact algorithm for batching and scheduling two part types in a mixed shop: A technical note. International Journal of Production Economics, 1998, 55, 53-56.	8.9	11
86	Group sequencing around a common due date. Discrete Optimization, 2008, 5, 594-604.	0.9	11
87	A single-item economic lot-sizing problem with a non-uniform resource: Approximation. European Journal of Operational Research, 2008, 189, 877-889.	5.7	11
88	Multi-product lot-sizing and sequencing on a single imperfect machine. Computational Optimization and Applications, 2011, 50, 465-482.	1.6	11
89	Total completion time minimization in two-machine flow shop scheduling problems with a fixed job sequence. Discrete Optimization, 2012, 9, 29-39.	0.9	11
90	Workforce planning and assignment in mixed-model assembly lines as a factor of line reconfigurability: state of the art. IFAC-PapersOnLine, 2019, 52, 2746-2751.	0.9	11

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91	Single machine group scheduling with ordered criteria. Annals of Operations Research, 1995, 57, 191-201.	4.1	10
92	Simplified Partial Digest Problem: Enumerative and Dynamic Programming Algorithms. IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2007, 4, 668-680.	3.0	10
93	A simple FPTAS for a single-item capacitated economic lot-sizing problem with a monotone cost structure. European Journal of Operational Research, 2010, 200, 621-624.	5.7	10
94	A generic FPTAS for partition type optimisation problems. International Journal of Planning and Scheduling, 2012, 1, 209.	0.1	10
95	Batch scheduling and common due date assignment problem: An NP-hard case. Discrete Applied Mathematics, 1997, 80, 251-254.	0.9	9
96	Corrigendum to â€œAn FPTAS for the parallel two-stage flowshop problemâ€•[Theoret. Comput. Sci. 657 (2017) 64â€“72]. Theoretical Computer Science, 2017, 687, 93-94.	0.9	9
97	Evaluating flexible solutions in single machine scheduling via objective function maximization: the study of computational complexity. RAIRO - Operations Research, 2007, 41, 1-18.	1.8	9
98	An unconstrained optimization problem is NP-hard given an oracle representation of its objective function: a technical note. Computers and Operations Research, 2002, 29, 2087-2091.	4.0	8
99	Scheduling a no-wait flow shop containing unbounded batching machines. IIE Transactions, 2005, 37, 685-696.	2.1	8
100	A generic approach to proving NP-hardness of partition type problems. Discrete Applied Mathematics, 2010, 158, 1908-1912.	0.9	8
101	Minimizing total completion time on a batching machine with job processing time compatibilities. Electronic Notes in Discrete Mathematics, 2010, 36, 1295-1302.	0.4	8
102	Scheduling an unbounded batching machine with job processing time compatibilities. Discrete Applied Mathematics, 2012, 160, 15-23.	0.9	8
103	Strong NP-hardness of scheduling problems with learning or aging effect. Annals of Operations Research, 2013, 206, 577-583.	4.1	8
104	Bi-criteria path problem with minimum length and maximum survival probability. OR Spectrum, 2019, 41, 469-489.	3.4	7
105	Profitability of a multi-model manufacturing line versus multiple dedicated lines. International Journal of Production Economics, 2021, 236, 108113.	8.9	7
106	Batch scheduling with deadlines on parallel machines: An NP-hard case. Information Processing Letters, 1997, 64, 69-74.	0.6	6
107	An FPTAS for a supply scheduling problem with nonâ€monotone cost functions. Naval Research Logistics, 2008, 55, 194-199.	2.2	6
108	Scheduling jobs in a contaminated area: a model and heuristic algorithms. Journal of the Operational Research Society, 2008, 59, 977-987.	3.4	6

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109	Multi-product lot-sizing and scheduling on unrelated parallel machines to minimize makespan. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 828-833.	0.4	6
110	Maximum Diversity Problem with Squared Euclidean Distance. Lecture Notes in Computer Science, 2019, , 541-551.	1.3	6
111	Comments on â€œProportionate flowshops with general position dependent processing timesâ€•[Inf. Process. Lett. 111 (2011) 174â€“177] and â€œMinimizing total load on a proportionate flowshop with position-dependent processing times and job-rejectionâ€•[Inf. Process. Lett. 132 (2018) 39â€“43]. Information Processing Letters, 2019, 147, 1-2.	0.6	6
112	Pedestrian Route Search Based on OpenStreetMap. Advances in Intelligent Systems and Computing, 2017, , 87-96.	0.6	6
113	Lot-sizing on a single imperfect machine: ILP models and FPTAS extensions. Computers and Industrial Engineering, 2013, 65, 561-569.	6.3	5
114	Scheduling arbitrary number of malleable tasks on multiprocessor systems. Bulletin of the Polish Academy of Sciences: Technical Sciences, 2014, 62, 255-261.	0.8	5
115	Two-agent scheduling with deteriorating jobs on a single parallel-batching machine: refining computational complexity. Journal of Scheduling, 2019, 22, 603-606.	1.9	5
116	A parallel machine schedule updating game with compensations and clients averse to uncertain loss. Computers and Operations Research, 2019, 103, 148-157.	4.0	5
117	Fully Polynomial Approximation Schemes for Decomposable Partition Problems. , 2000, , 397-401.		5
118	The simplified partial digest problem: Approximation and a graph-theoretic model. European Journal of Operational Research, 2011, 208, 142-152.	5.7	4
119	AnO(nlogn)algorithm for a single-item capacitated lot-sizing problem with linear costs and no backlogging. International Journal of Production Research, 2014, 52, 3758-3761.	7.5	4
120	On a single machine-scheduling problem with separated position and resource effects. Optimization, 2015, 64, 909-911.	1.7	4
121	Dynamic pricing with demand disaggregation for hotel revenue management. Journal of Heuristics, 2021, 27, 869-885.	1.4	4
122	A polynomial algorithm for lot-size scheduling of two type tasks. Information Processing Letters, 2002, 83, 229-235.	0.6	3
123	No-idle parallel-machine scheduling of unit-time jobs with a small number of distinct release dates and deadlines. Computers and Operations Research, 2021, 132, 105315.	4.0	3
124	Alternative algorithms for identical machines scheduling to maximize total early work with a common due date. Computers and Industrial Engineering, 2022, 171, 108386.	6.3	3
125	Special issue on scheduling in batch-processing industries and supply chains. International Journal of Production Economics, 2007, 105, 299-300.	8.9	2
126	Approximate solution of the control problem of supplies with many intervals and concave cost functions. Automation and Remote Control, 2008, 69, 1181-1187.	0.8	2

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127	On the approximability of the Simplified Partial Digest Problem. Discrete Applied Mathematics, 2009, 157, 3586-3592.	0.9	2
128	Multiproduct batching and scheduling with buffered rework: The case of a car paint shop. Naval Research Logistics, 2014, 61, 458-471.	2.2	2
129	Graphs with maximal induced matchings of the same size. Discrete Applied Mathematics, 2017, 216, 15-28.	0.9	2
130	Complexity of Bi-objective Buffer Allocation Problem in Systems with Simple Structure. Communications in Computer and Information Science, 2018, , 278-287.	0.5	2
131	Minimizing machine assignment costs over î”-approximate solutions of the scheduling problem P||Cmax. Theoretical Computer Science, 2019, 793, 70-78.	0.9	2
132	Lot-Sizing and Sequencing on a Single Imperfect Machine. Communications in Computer and Information Science, 2008, , 117-125.	0.5	2
133	Problem F2â^¥Cmax with forbidden jobs in the first or last position is easy. European Journal of Operational Research, 2007, 177, 1310-1311.	5.7	1
134	Graphs with Maximal Induced Matchings of the Same Size. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 57-62.	0.4	1
135	Vyacheslav Tanaev: contributions to scheduling and related areas. Journal of Scheduling, 2012, 15, 403-418.	1.9	1
136	Due window assignment and scheduling on parallel machines: a FPTAS for a bottleneck criterion. Bulletin of the Polish Academy of Sciences: Technical Sciences, 2014, 62, 805-808.	0.8	1
137	Minimizing the number of workers for one cycle of a paced production line. IFAC-PapersOnLine, 2015, 48, 2281-2286.	0.9	1
138	Bi-criteria sequencing of courses and formation of classes for a bottleneck classroom. Computers and Operations Research, 2016, 65, 53-63.	4.0	1
139	Knapsack problem with objective value gaps. Optimization Letters, 2017, 11, 31-39.	1.6	1
140	Simple paths with exact and forbidden lengths. Naval Research Logistics, 2018, 65, 78-85.	2.2	1
141	Lot-size scheduling of a single product on unrelated parallel machines. Optimization Letters, 2020, 14, 557-568.	1.6	1
142	Three parallel task assignment problems with shared resources. IISE Transactions, 2020, 52, 478-485.	2.4	1
143	Min-max controllable risk problems. 4or, 2021, 19, 93-101.	1.6	1
144	Minâ€sum controllable risk problems with concave risk functions of the same value range. Networks, 0, , .	2.7	1

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145	Selecting a subset of diverse points based on the squared euclidean distance. Annals of Mathematics and Artificial Intelligence, 2022, 90, 965-977.	1.3	1
146	On Finding Minimum Cardinality Subset of Vectors with a Constraint on the Sum of Squared Euclidean Pairwise Distances. Lecture Notes in Computer Science, 2020, , 40-45.	1.3	1
147	A DISCRETE EOQ PROBLEM WITH MAXIMUM ORDER SIZE COSTS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 259-263.	0.4	0
148	Creative heritage of Vyacheslav Sergeevich Tanaev: Seventieth anniversary. Automation and Remote Control, 2010, 71, 2021-2028.	0.8	0
149	Production Lot Sizes on a Single Imperfect Machine: FPTAS vs ILP models. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 590-595.	0.4	0
150	Editorial: new branches, old roots. Journal of Scheduling, 2012, 15, 399-401.	1.9	0
151	Comment on â€˜the strong NP-completeness of 3-PARTITION problem with Bâ©¾kmâ€™ by Zhongyi Jiang, Fangfang Chen, Chunqing Wu. Journal of the Operational Research Society, 2013, 64, 787-787.	3.4	0
152	A Transfer Line Design Problem with Setup Times and Costs. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 778-783.	0.4	0
153	Message from the BusinessClouds 2014 Workshop Chairs. , 2014, , .		0
154	Scientific school of Academician V. S. Tanaev: Results on the scheduling theory. Automation and Remote Control, 2014, 75, 1241-1256.	0.8	0
155	Decentralized sequencing of jobs on a single machine. , 2016, , .		0
156	Integrated Production and Delivery with Inventory Holding Costs. IFAC-PapersOnLine, 2016, 49, 910-915.	0.9	0
157	Single product lot-sizing on unrelated parallel machines with non-decreasing processing times. Journal of Physics: Conference Series, 2018, 944, 012032.	0.4	0
158	A Batching Machine Model for Lot Scheduling on a Single Machine. Foundations of Computing and Decision Sciences, 2018, 43, 37-40.	1.2	0
159	Fixed interval scheduling with thirdâ€party machines. Networks, 2021, 77, 361-371.	2.7	0
160	Provision-after-wait with preferences ordered by difference: Tighter complexity and better approximation. European Journal of Operational Research, 2021, 289, 1008-1012.	5.7	0
161	Workforce planning for cyclic production of multiple parts. , 2016, , .		0
162	Workforce planning for cyclic production of multiple parts. , 2016, , .		0

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163	Approach to optimizing charging infrastructure of autonomous trolleybuses for urban routes. Informatika, 2021, 18, 79-95.	0.3	0
164	Maxâ€“max, maxâ€“min, minâ€“max and minâ€“min knapsack problems with a parametric constraint. 4or, 0, , 1.	1.6	0