

References

- [1] J.O. Achugbue and F.Y. Chin. Scheduling the open shop to minimize mean flow time. *SIAM J. Comput.*, 11:709–720, 1982.
- [2] S. Albers and P. Brucker. The complexity of one-machine batching problems. *Discrete Appl. Math.*, 47(2):87–107, 1993.
- [3] I. Averbakh, O. Berman, and I. Chernykh. The m-machine flowshop problem with unit-time operations and precedence constraints. *Oper. Res. Lett.*, 33(3):263–266, 2005.
- [4] K.R. Baker. *Introduction to Sequencing and Scheduling*. John Wiley & Sons, New York, 1974.
- [5] K.R. Baker, E.L. Lawler, J.K. Lenstra, and A.H.G. Rinnooy Kan. Preemptive scheduling of a single machine to minimize maximum cost subject to release dates and precedence constraints. *Oper. Res.*, 31:381–386, 1983.
- [6] P. Baptiste. Polynomial time algorithms for minimizing the weighted number of late jobs on a single machine with equal processing times. *J. Sched.*, 2:245–252, 1999.
- [7] P. Baptiste. Batching identical jobs. *Math. Methods Oper. Res.*, 52(3):355–367, 2000.
- [8] P. Baptiste. Preemptive scheduling of identical machines. Technical Report 2000-314, Université de Technologie de Compiègne, France, 2000.
- [9] P. Baptiste. Scheduling equal-length jobs on identical parallel machines. *Discrete Appl. Math.*, 103(1):21–32, 2000.
- [10] P. Baptiste. On preemption redundancy. Technical Report, IBM T.J. Watson Research Center, New York, 2002.
- [11] P. Baptiste. A note on scheduling multiprocessor tasks with identical processing times. *Comput. Oper. Res.*, 30(13):2071–2078, 2003.
- [12] P. Baptiste. On minimizing the weighted number of late jobs in unit execution time openshops. *European J. Oper. Res.*, 149(2):344–354, 2003.
- [13] P. Baptiste, P. Brucker, S. Knust, and V. Timkovsky. Ten notes on equal-execution-time scheduling. *JOR*, 2:111–127, 2004.
- [14] P. Baptiste and A. Jougllet. On minimizing total tardiness in a serial batching problem. *RAIRO Oper. Res.*, 35(1):107–115, 2001.
- [15] P. Baptiste and B. Schieber. A note on scheduling tall/small multiprocessor tasks with unit processing time to minimize maximum tardiness. *J. Sched.*, 6(4):395–404, 2003.
- [16] P. Baptiste and V. Timkovsky. On preemption redundancy in scheduling unit processing time jobs on two parallel machines. *Oper. Res. Lett.*, 28(5):205–212, 2001.
- [17] P. Baptiste and V. Timkovsky. Shortest path to nonpreemptive schedules of unit-time jobs on two identical parallel machines with minimum total completion time. *Math. Methods Oper. Res.*, 60(1):145–153, 2004.
- [18] L. Bianco, J. Błażewicz, P. Dell’Olmo, and M. Drozdowski. Preemptive multiprocessor task scheduling with release times and time windows. *Ann. Oper. Res.*, 70:43–55, 1997.
- [19] J. Błażewicz. Scheduling dependent tasks with different arrival times to meet deadlines. In *Model. Perform. Eval. Comput. Syst., Proc. int. Workshop, Stresa 1976*, pages 57–65. North Holland, Amsterdam, 1976.
- [20] J. Błażewicz, P. Dell’ Olmo, M. Drozdowski, and M.G. Speranza. Scheduling multiprocessor tasks on three dedicated processors. *Inf. Process. Lett.*, 41(5):275–280, 1992.

- [21] J. Błażewicz, P. Dell' Olmo, M. Drozdowski, and M.G. Speranza. Corrigendum to: Scheduling multiprocessor tasks on three dedicated processors. *Inf. Process. Lett.*, 49(5):269–270, 1994.
- [22] J. Błażewicz, M. Drabowski, and J. Węglarz. Scheduling multiprocessor tasks to minimize schedule length. *IEEE Trans. Comput.*, 35(5):389–393, 1986.
- [23] J. Błażewicz, M. Drozdowski, D. de Werra, and J. Węglarz. Deadline scheduling of multiprocessor tasks. *Discrete Appl. Math.*, 65(1-3):81–95, 1996.
- [24] J. Błażewicz, J.K. Lenstra, and A.H.G. Rinnooy Kan. Scheduling subject to resource constraints: classification and complexity. *Discrete Appl. Math.*, 5(1):11–24, 1983.
- [25] J. Błażewicz and Z. Liu. Scheduling multiprocessor tasks with chain constraints. *European J. Oper. Res.*, 94(2):231–241, 1996.
- [26] H. Bräsel, D. Kluge, and F. Werner. A polynomial algorithm for the $[n/m/0, t_{ij} = 1, tree/C_{\max}]$ open shop problem. *European J. Oper. Res.*, 72(1):125–134, 1994.
- [27] H. Bräsel, D. Kluge, and F. Werner. A polynomial algorithm for an open shop problem with unit processing times and tree constraints. *Discrete Appl. Math.*, 59(1):11–21, 1995.
- [28] P. Brucker. *Scheduling algorithms*. Springer-Verlag, Berlin, first edition, 1995.
- [29] P. Brucker, T.C.E. Cheng, S. Knust, and N.V. Shakhlevich. Complexity results for flow-shop and open-shop problems with transportation delays. *Annals of Operations Research*, 129:81–106, 2004.
- [30] P. Brucker, C. Dhaenens-Flipo, S. Knust, S.A. Kravchenko, and F. Werner. Complexity results for parallel machine problems with a single server. *J. Sched.*, 5(6):429–457, 2002.
- [31] P. Brucker, M.R. Garey, and D.S. Johnson. Scheduling equal-length tasks under treelike precedence constraints to minimize maximum lateness. *Math. Oper. Res.*, 2(3):275–284, 1977.
- [32] P. Brucker, A. Gladky, H. Hoogeveen, M.Y. Kovalyov, C.N. Potts, T. Tautenhahn, and S.L. van de Velde. Scheduling a batching machine. *J. Sched.*, 1(1):31–54, 1998.
- [33] P. Brucker, S. Heitmann, and J. Hurink. How useful are preemptive schedules? *Oper. Res. Lett.*, 31(2):129–136, 2003.
- [34] P. Brucker, J. Hurink, and S. Knust. A polynomial algorithm for $P|p_j = 1, r_j, outtree|\sum C_j$. *Math. Methods Oper. Res.*, 56(3):407–412, 2002.
- [35] P. Brucker, J. Hurink, and W. Kubiak. Scheduling identical jobs with chain precedence constraints on two uniform machines. *Math. Methods Oper. Res.*, 49(2):211–219, 1999.
- [36] P. Brucker, B. Jurisch, and M. Jurisch. Open shop problems with unit time operations. *Z. Oper. Res.*, 37(1):59–73, 1993.
- [37] P. Brucker, B. Jurisch, and A. Krämer. Complexity of scheduling problems with multi-purpose machines. *Ann. Oper. Res.*, 70:57–73, 1997.
- [38] P. Brucker and S. Knust. Complexity results for single-machine problems with positive finish-start time-lags. *Computing*, 63:299–316, 1999.
- [39] P. Brucker, S. Knust, and C. Oguz. Scheduling chains with identical jobs and constant delays on a single machine. *Math. Methods Oper. Res.*, 63(1):63–75, 2006.
- [40] P. Brucker, S. Knust, D. Roper, and Y. Zinder. Scheduling UET task systems with concurrency on two parallel identical processors. *Math. Methods Oper. Res.*, 53(3):369–387, 2000.
- [41] P. Brucker, S. Knust, and G. Wang. Complexity results for flow-shop problems with a single server. *European J. Oper. Res.*, 165(2):398–407, 2005.

- [42] P. Brucker and M.Y. Kovalyov. Single machine batch scheduling to minimize the weighted number of late jobs. *Math. Methods Oper. Res.*, 43(1):1–8, 1996.
- [43] P. Brucker and A. Krämer. Shop scheduling problems with multiprocessor tasks on dedicated processors. *Ann. Oper. Res.*, 57:13–27, 1995.
- [44] P. Brucker and A. Krämer. Polynomial algorithms for resource-constrained and multiprocessor task scheduling problems. *European J. Oper. Res.*, 90:214–226, 1996.
- [45] P. Brucker and S.A. Kravchenko. Preemption can make parallel machine scheduling problems hard. OSM Reihe P, Heft 211, Universität Osnabrück, Fachbereich Mathematik/Informatik, 1999.
- [46] P. Brucker and S.A. Kravchenko. Complexity of mean flow time scheduling problems with release dates. OSM Reihe P, Heft 251, Universität Osnabrück, Fachbereich Mathematik/Informatik, 2004.
- [47] P. Brucker and S.A. Kravchenko. Scheduling jobs with release times on parallel machines to minimize total tardiness. OSM Reihe P, Heft 258, Universität Osnabrück, Fachbereich Mathematik/Informatik, 2005.
- [48] P. Brucker and S.A. Kravchenko. Scheduling jobs with equal processing times and time windows on identical parallel machines. *J. Sched.*, 11:229–237, 2008.
- [49] P. Brucker, S.A. Kravchenko, and Y.N. Sotskov. On the complexity of two machine job-shop scheduling with regular objective functions. *OR Spektrum*, 19(1):5–10, 1997.
- [50] P. Brucker, S.A. Kravchenko, and Y.N. Sotskov. Preemptive job-shop scheduling problems with a fixed number of jobs. *Math. Methods Oper. Res.*, 49(1):41–76, 1999.
- [51] J. Bruno, E.G. Coffman, Jr., and R. Sethi. Scheduling independent tasks to reduce mean finishing time. *Comm. ACM*, 17:382–387, 1974.
- [52] J. Bruno, J.W. Jones, III, and K. So. Deterministic scheduling with pipelined processors. *IEEE Trans. Comput.*, 29(4):308–316, 1980.
- [53] X. Cai, C.-Y. Lee, and C.-L. Li. Minimizing total completion time in two-processor task systems with prespecified processor allocations. *Naval Res. Logist.*, 45(2):231–242, 1998.
- [54] Y. Cho and S. Sahni. Preemptive scheduling of independent jobs with release and due times on open, flow and job shops. *Oper. Res.*, 29(3):511–522, 1981.
- [55] E.G. Coffman, Jr. and R.L. Graham. Optimal scheduling for two-processor systems. *Acta Informat.*, 1:200–213, 1971/1972.
- [56] E.G. Coffman, Jr., J. Sethuraman, and V.G. Timkovsky. Ideal preemptive schedules on two processors. *Acta Informat.*, 39:597–612, 2003.
- [57] E.G. Coffman, Jr., M. Yannakakis, M.J. Magazine, and C. Santos. Batch sizing and job sequencing on a single machine. *Ann. Oper. Res.*, 26(1-4):135–147, 1990.
- [58] G.I. Davida and D.J. Linton. A new algorithm for the scheduling of tree structured tasks. In *Proc. Conf. Inform. Sci. and Syst.*, pages 543–548, Baltimore, MD, 1976.
- [59] M.I. Dessouky, B.J. Lageweg, J.K. Lenstra, and S.L. van de Velde. Scheduling identical jobs on uniform parallel machines. *Statist. Neerlandica*, 44(3):115–123, 1990.
- [60] M. Dror, W. Kubiak, and P. Dell’ Olmo. Strong-weak chain constrained scheduling. *Ricerca Operativa*, 27:35–49, 1998.
- [61] M. Drozdowski. *Problems and algorithms of multiprocessor tasks scheduling*. PhD thesis, Technical University of Poznan, Department of Computer Science, 1992.

- [62] M. Drozdowski and P. Dell' Olmo. Scheduling multiprocessor tasks for mean flow time criterion. *Comput. Oper. Res.*, 27(6):571–585, 2000.
- [63] J. Du and J.Y.-T. Leung. Complexity of scheduling parallel task systems. *SIAM J. Discrete Math.*, 2(4):473–487, 1989.
- [64] J. Du and J.Y.-T. Leung. Minimizing total tardiness on one machine is NP-hard. *Math. Oper. Res.*, 15(3):483–495, 1990.
- [65] J. Du and J.Y.-T. Leung. Minimizing the number of late jobs on unrelated machines. *Oper. Res. Lett.*, 10(3):153–158, 1991.
- [66] J. Du and J.Y.-T. Leung. Minimizing mean flow time in two-machine open shops and flow shops. *J. Algorithms*, 14(1):24–44, 1993.
- [67] J. Du, J.Y.-T. Leung, and C.S. Wong. Minimizing the number of late jobs with release time constraint. *J. Combin. Math. Combin. Comput.*, 11:97–107, 1992.
- [68] J. Du, J.Y.-T. Leung, and G.H. Young. Minimizing mean flow time with release time constraint. *Theoret. Comput. Sci.*, 75(3):347–355, 1990.
- [69] J. Du, J.Y.-T. Leung, and G.H. Young. Scheduling chain-structured tasks to minimize makespan and mean flow time. *Inform. and Comput.*, 92(2):219–236, 1991.
- [70] L. Finta and Z. Liu. Single machine scheduling subject to precedence delays. *Discrete Appl. Math.*, 70(3):247–266, 1996.
- [71] H.N. Gabow. An almost-linear algorithm for two-processor scheduling. *J. Assoc. Comput. Mach.*, 29(3):766–780, 1982.
- [72] M.R. Garey and D.S. Johnson. Scheduling tasks with nonuniform deadlines on two processors. *J. Assoc. Comput. Mach.*, 23:461–467, 1976.
- [73] M.R. Garey and D.S. Johnson. Two-processor scheduling with start-times and deadlines. *SIAM J. Comput.*, 6(3):416–426, 1977.
- [74] M.R. Garey and D.S. Johnson. “Strong” NP-completeness results: motivation, examples, and implications. *J. Assoc. Comput. Mach.*, 25(3):499–508, 1978.
- [75] M.R. Garey, D.S. Johnson, and R. Sethi. The complexity of flowshop and jobshop scheduling. *Math. Oper. Res.*, 1(2):117–129, 1976.
- [76] P.C. Gilmore and R.E. Gomory. Sequencing a one state-variable machine: A solvable case of the traveling salesman problem. *Oper. Res.*, 12:655–679, 1964.
- [77] T. Gonzalez and D.B. Johnson. A new algorithm for preemptive scheduling of trees. *J. Assoc. Comput. Mach.*, 27(2):287–312, 1980.
- [78] T. Gonzalez and S. Sahni. Open shop scheduling to minimize finish time. *J. Assoc. Comput. Mach.*, 23(4):665–679, 1976.
- [79] T. Gonzalez and S. Sahni. Flowshop and jobshop schedules: complexity and approximation. *Oper. Res.*, 26(1):36–52, 1978.
- [80] N. Hall, C.N. Potts, and C. Sriskandarajah. Parallel machine scheduling with a common server. *Discrete Appl. Math.*, 102(3):223–243, 2000.
- [81] L.A. Herrbach and J.Y.-T. Leung. Preemptive scheduling of equal length jobs on two machines to minimize mean flow time. *Oper. Res.*, 38(3):487–494, 1990.
- [82] D.S. Hochbaum and D. Landy. Scheduling with batching: minimizing the weighted number of tardy jobs. *Oper. Res. Lett.*, 16(2):79–86, 1994.

- [83] J.A. Hoogeveen, S.L. van de Velde, and B. Veltman. Complexity of scheduling multiprocessor tasks with prespecified processor allocations. *Discrete Appl. Math.*, 55(3):259–272, 1994.
- [84] W.A. Horn. Minimizing average flow time with parallel machines. *Oper. Res.*, 21:846–847, 1973.
- [85] E.C. Horvath, S. Lam, and R. Sethi. A level algorithm for preemptive scheduling. *J. Assoc. Comput. Mach.*, 24(1):32–43, 1977.
- [86] T.C. Hu. Parallel sequencing and assembly line problems. *Oper. Res.*, 9:841–848, 1961.
- [87] Y. Huo and J.Y.-T. Leung. Minimizing total completion time for UET tasks with release time and outtree precedence constraints. *Math. Methods Oper. Res.*, 62(2):275–279, 2005.
- [88] J. Hurink and S. Knust. Flow-shop problems with transportation times and a single robot. *Discrete Applied Mathematics*, 112(1-3):199–216, 2001.
- [89] S.M. Johnson. Optimal two-and-three-stage production schedules with set-up times included. *Naval Res. Logist. Quart.*, 1:61–68, 1954.
- [90] B. Jurisch. Lower bounds for the job-shop scheduling problem on multi-purpose machines. *Discrete Appl. Math.*, 58(2):145–156, 1995.
- [91] R.M. Karp. Reducibility among combinatorial problems. In *Complexity of computer computations (Proc. Sympos., IBM Thomas J. Watson Res. Center, Yorktown Heights, N.Y., 1972)*, pages 85–103. Plenum, New York, 1972.
- [92] H. Kise. On an automated two-machine flowshop scheduling problem with infinite buffer. *J. Oper. Res. Soc. Japan*, 34(3):354–361, 1991.
- [93] S. Knust. *Shop-scheduling problems with transportation*. PhD thesis, Universität Osnabrück, Fachbereich Mathematik/Informatik, 1999.
- [94] A. Krämer. *Scheduling multiprocessortasks on dedicated processors*. PhD thesis, Universität Osnabrück, Fachbereich Mathematik/Informatik, 1995.
- [95] S.A. Kravchenko. A polynomial algorithm for a two-machine no-wait job-shop scheduling problem. *European J. Oper. Res.*, 106:101–107, 1998.
- [96] S.A. Kravchenko. Minimizing the number of late jobs for the two-machine unit-time job-shop scheduling problem. *Discrete Appl. Math.*, 98(3):209–217, 1999.
- [97] S.A. Kravchenko. On the complexity of minimizing the number of late jobs in unit time open shops. *Discrete Appl. Math.*, 100(2):127–132, 1999.
- [98] S.A. Kravchenko and F. Werner. Parallel machine scheduling problems with a single server. *Math. Comput. Modelling*, 26(12):1–11, 1997.
- [99] S.A. Kravchenko and F. Werner. Preemptive scheduling on uniform machines to minimize mean flow time. *Computers & OR*, 36(10):2816–2821, 2009.
- [100] M. Kubale. The complexity of scheduling independent two-processor tasks on dedicated processors. *Inf. Process. Lett.*, 24(3):141–147, 1987.
- [101] M. Kubale. Preemptive scheduling of two-processor tasks on dedicated processors. *Zeszyty Naukowe Politechnik: Śląskiej, Seria: Automatyka Z. 100*, 1082:145–153, 1990.
- [102] W. Kubiak. Exact and approximate algorithms for scheduling unit time tasks with tree-like precedence constraints. In *Abstracts EURO IX - TIMS XXVIII Paris, 195*, 1988.
- [103] W. Kubiak. A pseudo-polynomial algorithm for a two-machine no-wait job-shop scheduling problem. *European J. Oper. Res.*, 43(3):267–270, 1989.

- [104] W. Kubiak, C. Sriskandarajah, and K. Zaras. A note on the complexity of openshop scheduling problems. *INFOR*, 29(4):284–294, 1991.
- [105] W. Kubiak and V.G. Timkovsky. A polynomial-time algorithm for total completion time minimization in two-machine job-shop with unit-time operations. *European J. Oper. Res.*, 94:310–320, 1996.
- [106] J. Labetoulle, E.L. Lawler, J.K. Lenstra, and A.H.G. Rinnooy Kan. Preemptive scheduling of uniform machines subject to release dates. In *Progress in combinatorial optimization (Waterloo, Ont., 1982)*, pages 245–261. Academic Press, Toronto, Ont., 1984.
- [107] E.L. Lawler. Optimal sequencing of a single machine subject to precedence constraints. *Management Sci.*, 19:544–546, 1973.
- [108] E.L. Lawler. A “pseudopolynomial” algorithm for sequencing jobs to minimize total tardiness. *Ann. of Discrete Math.*, 1:331–342, 1977.
- [109] E.L. Lawler. Sequencing jobs to minimize total weighted completion time subject to precedence constraints. *Ann. Discrete Math.*, 2:75–90, 1978.
- [110] E.L. Lawler. Preemptive scheduling of uniform parallel machines to minimize the weighted number of late jobs. Report BW 105, Centre for Mathematics and Computer Science, Amsterdam, 1979.
- [111] E.L. Lawler. Preemptive scheduling of precedence-constrained jobs on parallel machines. In M.A.H. Dempster, J.K. Lenstra, and A.H.G. Rinnooy Kan, editors, *Deterministic and stochastic scheduling, Proceedings of the NATO Advanced Study and Research Institute on Theoretical Approaches to Scheduling Problems held in Durham, July 6–17, 1981*, volume 84 of *NATO Advanced Study Institute Series C: Mathematical and Physical Sciences*, pages 101–123. Dordrecht, 1982. D. Reidel Publishing Co.
- [112] E.L. Lawler. Recent results in the theory of machine scheduling. In A. Bachem, M. Groetschel, and B. Korte, editors, *Mathematical programming: the state of the art (Bonn, 1982)*, pages 202–234. Springer, Berlin, 1983.
- [113] E.L. Lawler. A dynamic programming algorithm for preemptive scheduling of a single machine to minimize the number of late jobs. *Ann. Oper. Res.*, 26(1-4):125–133, 1990.
- [114] E.L. Lawler and J. Labetoulle. On preemptive scheduling of unrelated parallel processors by linear programming. *J. Assoc. Comput. Mach.*, 25(4):612–619, 1978.
- [115] E.L. Lawler, J.K. Lenstra, and A.H.G. Rinnooy Kan. Minimizing maximum lateness in a two-machine open shop. *Math. Oper. Res.*, 6(1):153–158, 1981.
- [116] E.L. Lawler, J.K. Lenstra, and A.H.G. Rinnooy Kan. Erratum: “Minimizing maximum lateness in a two-machine open shop” [Math. Oper. Res. **6** (1981), no. 1, 153-158]. *Math. Oper. Res.*, 7(4):635, 1982.
- [117] E.L. Lawler, J.K. Lenstra, A.H.G. Rinnooy Kan, and D.B. Shmoys. *Sequencing and Scheduling: Algorithms and Complexity*, volume 4 of *Operations Research and Management Science*. CWI, Amsterdam, 1989.
- [118] E.L. Lawler and C.U. Martel. Preemptive scheduling of two uniform machines to minimize the number of late jobs. *Oper. Res.*, 37(2):314–318, 1989.
- [119] E.L. Lawler and J.M. Moore. A functional equation and its application to resource allocation and sequencing problems. *Management Sci.*, 16:77–84, 1969.
- [120] C.-Y. Lee and X. Cai. Scheduling one and two-processor tasks on two parallel processors. *IIE Transactions on Scheduling and Logistics*, 31:445–455, 1999.
- [121] J.K. Lenstra. Not published.

- [122] J.K. Lenstra and A.H.G. Rinnooy Kan. Complexity of scheduling under precedence constraints. *Oper. Res.*, 26(1):22–35, 1978.
- [123] J.K. Lenstra and A.H.G. Rinnooy Kan. Computational complexity of discrete optimization problems. *Ann. Discrete Math.*, 4:121–140, 1979.
- [124] J.K. Lenstra and A.H.G. Rinnooy Kan. Complexity results for scheduling chains on a single machine. *European J. Oper. Res.*, 4(4):270–275, 1980.
- [125] J.K. Lenstra, A.H.G. Rinnooy Kan, and P. Brucker. Complexity of machine scheduling problems. *Ann. of Discrete Math.*, 1:343–362, 1977.
- [126] J.Y.-T. Leung, O. Vornberger, and J.D. Witthoff. On some variants of the bandwidth minimization problem. *SIAM J. Comput.*, 13(3):650–667, 1984.
- [127] J.Y.-T. Leung and G.H. Young. Minimizing total tardiness on a single machine with precedence constraints. *ORSA J. Comput.*, 2(4):346–352, 1990.
- [128] J.Y.-T. Leung and G.H. Young. Preemptive scheduling to minimize mean weighted flow time. *Inform. Process. Lett.*, 34(1):47–50, 1990.
- [129] C.Y. Liu and R.L. Bulfin. On the complexity of preemptive open-shop scheduling problems. *Oper. Res. Lett.*, 4(2):71–74, 1985.
- [130] C.Y. Liu and R.L. Bulfin. Scheduling open shops with unit execution times to minimize functions of due dates. *Oper. Res.*, 36(4):553–559, 1988.
- [131] E.L. Lloyd. Concurrent task systems. *Oper. Res.*, 29(1):189–201, 1981.
- [132] I. Lushchakova. Two machine preemptive scheduling problem with release dates, equal processing times and precedence constraints. *European J. Oper. Res.*, 171(1):107–122, 2006.
- [133] W.L. Maxwell. On sequencing n jobs on one machine to minimize the number of late jobs. *Management Sci.*, 16:295–29, 1970.
- [134] R. McNaughton. Scheduling with deadlines and loss functions. *Management Sci.*, 6:1–12, 1959.
- [135] W. Meyer. *Geometrische Methoden zur Lösung von Job-Shop Problemen und deren Verallgemeinerungen*. PhD thesis, Universität Osnabrück, Fachbereich Mathematik/Informatik, 1992.
- [136] M. Middendorf and V.G. Timkovsky. Transversal graphs for partially ordered sets: sequencing, merging and scheduling problems. *J. Comb. Optim.*, 3(4):417–435, 1999.
- [137] C.L. Monma. Linear-time algorithms for scheduling on parallel processors. *Oper. Res.*, 30:116–124, 1982.
- [138] J.M. Moore. An n job, one machine sequencing algorithm for minimizing the number of late jobs. *Management Sci.*, 15:102–109, 1968.
- [139] A. Munier and F. Sourd. Scheduling chains on a single machine with non-negative time lags. *Math. Methods Oper. Res.*, 57(1):111–123, 2003.
- [140] R.R. Muntz and E.G. Coffman, Jr. Preemptive scheduling of real-time tasks on multiprocessor systems. *J. Assoc. Comput. Mach.*, 17:324–338, 1970.
- [141] C.T. Ng, T.C.E. Cheng, and J.J. Yuan. A note on the single machine serial batching scheduling problem to minimize maximum lateness with precedence constraints. *Oper. Res. Lett.*, 30:66–68, 2002.

- [142] C. Oguz and X. Qi. Preemptive scheduling multiprocessor tasks to minimize total weighted completion time on two dedicated processors. In *Proc. 10th International Workshop on Project Management and Scheduling*, pages 270–274, Poznan, Poland, 2006.
- [143] V.J. Rayward-Smith and D. Rebaine. Open shop scheduling with delays. *RAIRO Inform. Théor. Appl.*, 26(5):439–447, 1992.
- [144] S.S. Reddi and C.V. Ramamoorthy. On the flow-shop sequencing problem with no wait in process. *Operational Res. Quart.*, 23:323–331, 1972.
- [145] H. Röck. Some new results in flow shop scheduling. *Z. Oper. Res. Ser. A-B*, 28(1):1–16, 1984.
- [146] H. Röck. The three-machine no-wait flow shop is NP-complete. *J. Assoc. Comput. Mach.*, 31(2):336–345, 1984.
- [147] S. Sahni and Y. Cho. Complexity of scheduling shops with no wait in process. *Math. Oper. Res.*, 4(4):448–457, 1979.
- [148] see: Assignment problem.
- [149] see: Earliest start schedule.
- [150] see: Network flow problem.
- [151] see: Parallel machine problem.
- [152] see: Single machine problem.
- [153] R. Sethi. Scheduling graphs on two processors. *SIAM J. Comput.*, 5(1):73–82, 1976.
- [154] J.B. Sidney. An extension of Moore’s due date algorithm. In *Symposium on the Theory of Scheduling and its Applications (North Carolina State Univ., Raleigh, N. C., 1972)*, pages 393–398. Lecture Notes in Economics and Mathematical Systems, Vol. 86, Berlin, 1973. Springer. Incorporating the results of discussion by Hamilton Emmons and John Rau.
- [155] B. Simons. A fast algorithm for single processor scheduling. In *19th Annual Symposium on Foundations of Computer Science (Ann Arbor, Mich., 1978)*, pages 246–252. IEEE, Long Beach, Calif., 1978.
- [156] B. Simons. Multiprocessor scheduling of unit-time jobs with arbitrary release times and deadlines. *SIAM J. Comput.*, 12(2):294–299, 1983.
- [157] R.A. Sitters. Two NP-hardness results for preemptive minsum scheduling of unrelated parallel machines. In *Proc. 8th International IPCO Conference, Lecture Notes in Computer Science*, pages 396–405. Springer, 2001.
- [158] Y.N. Sotskov. The complexity of shop-scheduling problems with two or three jobs. *European J. Oper. Res.*, 53(3):326–336, 1991.
- [159] Y.N. Sotskov and N.V. Shakhlevich. NP-hardness of shop-scheduling problems with three jobs. *Discrete Appl. Math.*, 59(3):237–266, 1995.
- [160] C. Sriskandarajah and P. Ladet. Some no-wait shops scheduling problems: complexity aspect. *European J. Oper. Res.*, 24(3):424–438, 1986.
- [161] C. Sriskandarajah and E. Wagneur. On the complexity of preemptive openshop scheduling problems. *European J. Oper. Res.*, 77(3):404–414, 1994.
- [162] V.S. Tanaev, Y.N. Sotskov, and V.A. Strusevich. *Scheduling theory. Multi-stage systems*, volume 285 of *Mathematics and its Applications*. Kluwer Academic Publishers Group, Dordrecht, 1994. Translated and revised from the 1989 Russian original by the authors.

- [163] T. Tautenhahn and G.J. Woeginger. Minimizing the total completion time in a unit-time open shop with release times. *Oper. Res. Lett.*, 20(5):207–212, 1997.
- [164] Z. Tian, C.T. Ng, and T.C.E. Cheng. An $O(n^2)$ algorithm for scheduling equal-length preemptive jobs on a single machine to minimize total tardiness. *J. Sched.*, 9(4):343–364, 2006.
- [165] V.G. Timkovsky. On the complexity of scheduling an arbitrary system. *Soviet J. Comput. Systems Sci.*, 23(5):46–52, 1985.
- [166] V.G. Timkovsky. A polynomial-time algorithm for the two-machine unit-time release-date job-shop schedule-length problem. *Discrete Appl. Math.*, 77(2):185–200, 1997.
- [167] V.G. Timkovsky. Is a unit-time job shop not easier than identical parallel machines? *Discrete Appl. Math.*, 85(2):149–162, 1998.
- [168] V.G. Timkovsky. Identical parallel machines vs. unit-time shops and preemptions vs. chains in scheduling complexity. *European J. Oper. Res.*, 149(2):355–376, 2003.
- [169] J.D. Ullman. NP-complete scheduling problems. *J. Comput. System Sci.*, 10:384–393, 1975.
- [170] J.D. Ullman. Complexity of sequencing problems. In J.L. Bruno, E.G. Coffman, Jr., R.L. Graham, W.H. Kohler, R. Sethi, K. Steiglitz, and J.D. Ullman, editors, *Computer and Job/Shop Scheduling Theory*. John Wiley & Sons Inc., New York, 1976.
- [171] E.D. Wikum, D.C. Llewellyn, and G.L. Nemhauser. One-machine generalized precedence constrained scheduling problems. *Oper. Res. Lett.*, 16(2):87–99, 1994.
- [172] W. Yu. *The two-machine flow shop problem with delays and the one-machine total tardiness problem*. PhD thesis, Technische Universiteit Eindhoven, Eindhoven, 1996. Dissertation, Technische Universiteit Eindhoven, Eindhoven, 1996.
- [173] W. Yu, H. Hoogeveen, and J.K. Lenstra. Minimizing makespan in a two-machine flow shop with delays and unit-time operations is NP-hard. *J. Sched.*, 7(5):333–348, 2004.
- [174] Y. Zinder and V.H. Do. Scheduling UET tasks on two parallel machines with the criteria of makespan and total completion time. In G. Kendall, E. Burke, S. Petrovic, and M. Gendreau, editors, *Multidisciplinary Scheduling: Theory and Applications*, pages 83–112. Springer, 2005.
- [175] Y. Zinder, V.H. Do, and C. Oguz. Computational complexity of some scheduling problems with multiprocessor tasks. *Discr. Opt.*, 2(4):391–408, 2005.