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Frank Werner, apl. Prof. Dr. rer. nat. habil.

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Education

- Sep 1980 – Aug 1983* **Technische Hochschule Magdeburg**
Dr. rer. nat. habil., Mathematics, Ph.D. student
Magdeburg, Germany
- Sep 1975 – Aug 1980* **Technische Hochschule Magdeburg**
Dipl.-Math., Mathematics
Magdeburg, Germany
- Sep 1971 – Aug 1973* **EOS Geschwister Scholl Magdeburg**
High-school degree, Secondary school
Magdeburg, Germany

Thesis

- Frank Werner: *Zur Lösung spezieller Reihenfolgeprobleme*. Sektion Mathematik und Physik, Technische Hochschule Magdeburg, 04/1984, Degree: Dr. rer. nat. (Ph.D.) with Summa cum laude, Supervisor: Egon Seiffart
- Frank Werner: *Zur Struktur und näherungsweise Lösung ausgewählter kombinatorischer Optimierungsprobleme*. Sektion Mathematik, Technische Universität Magdeburg, 07/1989, Degree: Dr. rer. nat. habil. (Habilitation thesis)

Research Experience

- Mar 2004 – Jul 2007* **Scheduling for Modern Manufacturing, Logistics and Supply Chains (03-51-5501)**
Otto-von-Guericke-Universität Magdeburg, Faculty of Mathematics
Magdeburg, Germany
- The major subjects of this project were: Scheduling for hybrid manufacturing systems, coordinating scheduling with logistics and scheduling in supply chains.

Sep 1993 – May 1998 **Constraint Scheduling: Mathematical Models, Algorithms, and Applications (93-257 and 93-257 ext)**
Otto-von-Guericke-Universität Magdeburg, Faculty of Mathematics
Magdeburg, Germany

The objective was to study classes of scheduling problems in connection with production planning and with the design of computer systems. Models representing these problems will be formulated and basic solution methods will be investigated.

Sep 1992 – Aug 1998 **Development and Investigation of Scheduling Models and Algorithms**
Otto-von-Guericke-Universität Magdeburg, Faculty of Mathematics
Magdeburg, Germany

Algorithms for shop scheduling problems have been developed and investigated.

Statistics

RG Score 36.49
Publications 353
Reads 32,214
Citations 3088

Awards & Grants

Apr 2018 Award: Best Paper Award International Journal of Production Research for 'A dynamic model and an algorithm for short-term supply chain scheduling in the smart factory 4.0 by D. Ivanov, A. Dolgui, B. Sokolov, F. Werner and M. Ivanova (Vol. 54, No., 2, 2016, 386 - 402).

Jun 2009 Award: Price of the National Organizing Committee for the paper 'Hierarchical Scheduling of Mobile Robots in Production-Transportation Supply Chains

Feb 1992 Grant: Alexander-von-Humboldt Foundation (Research stay, 6 months in 1992, 1 month in 1993)

Jul 1981 Award: Award of the Department of Mathematics and Physics of the TU Magdeburg

Skills & Activities

Skills Optimization, Scheduling, Heuristics, Combinatorial Optimization, Algorithms, Algorithm Development, Complexity, Operations Research, Applied

Mathematics, Supply Chain Management, Manufacturing, Optimization (Mathematical Programming), Logistics, Dynamic Programming, Integer Programming, Mathematical Economics, Graph Algorithms, Genetic Algorithm, Soft Computing, Multiobjective Optimization, Discrete Optimization, Mathematical Programming, Simulation, Linear Programming, Optimization Modeling, Global Optimization, Modeling, System Optimization, Optimization Theory, Nonlinear Programming, Railway Scheduling, Scheduling Theory, Network Optimization, Stochastic Optimization, Linear Programming, Teaching Experience, Graph Theory, Simulated Annealing, Constraint Programming, Nonlinear Optimization, Metaheuristic, Approximation Algorithms, Production Systems, Computation, Production, Biological Evolution

Languages English, German, Russian

Interests Associate Editor for International Journal of Production Research, Journal of Scheduling, and Operations Research and Decisions;
Member of the Editorial Board for Journal of Industrial and Management Optimization, Journal of Applied Mathematics, International Journal of Mathematics and Mathematical Sciences, International Journal of Fuzzy System Applications, World Journal of Methodology, Operations Research Perspectives, International Journal of Applied and Computational Mathematics, Research in Applied Mathematics, Advances in Systems Science and Applications, Algorithms, Mathematics, and Current Trends in Computer Sciences & Applications;
Member of the Advisory Board of the International Journal of Operational Research Nepal and Sci;
Member of the Team Developing the Program Package 'A Library of Scheduling Algorithms' (LiSA);
Referee for Alexander-von-Humboldt Foundation, New Eurasia Foundation and Russian Science Foundation

Publication Highlights

Svetlana A. Kravchenko, Frank Werner: *Parallel machine problems with equal processing times: a survey*. Journal of Scheduling 01/2011; 14:435-444.

Irina V Gribkovskaia, Sergey Kovalev, Frank Werner: *Batching Work and Rework Processes on Dedicated Facilities to Minimize the Makespan*. Omega 12/2010; 38(6):522 - 527.

Yury Orlovich, Alexandre Dolgui, Gerd Finke, Valery Gordon, Frank Werner: *The complexity of dissociation problems in dissociation set problems in graphs*. Discrete Applied Mathematics, 8/2011; 159(13):1352 - 1366.

Peter Brucker, Clarisse Dhanens-Flipo, Sigrid Knust, Svetlana Kravchenko, Frank Werner: *Complexity results for Parallel Machine Scheduling with a Single Server*. Journal of Scheduling 12/2002; 5(6):429 - 457.

Books

Frank Werner: *A Refresher Course in Mathematics*. First edition 05/2016; Bookboon Publishers., ISBN: 978-87-403-1319-2

Yuri Sotskov, Frank Werner (eds.): *Sequencing and Scheduling with Inaccurate Data*. 1, 432 pages, 01/2014; Nova Science Publishers., ISBN: 978-1-62948-677-2 (hardcover); 978-1-62948-722-9 (ebook)

Yu N Sotskov, N Yu, T.-C Sotskova, F Lai, Werner: *Scheduling under Uncertainty: Theory and Algorithms*. 1st Edition, 06/2010; Belarusian Science.

Frank Werner, Yuri Sotskov: *Mathematics of Economics and Business*. First Edition 01/2006; Taylor and Francis / Routledge, Abingdon/UK, New York/USA., ISBN: 0-415-33281-8

Frank Werner, Larysa Burtseva, Yuri Sotskov (eds.): *Algorithms for Scheduling Problems*, 07/2018; MDPI, Basel/Switzerland, ISBN: 978-3-03897-119-1

Book Chapters

Julia Lange, Frank Werner: *A Permutation-Based Neighborhood for the Blocking Job-Shop Problem with Total Tardiness Minimization*. Operations Research Proceedings 2017, 01/2018: pages 581-586; , ISBN: 978-3-319-89919-0, DOI:10.1007/978-3-319-89920-6_77

Yuri Sotskov, Frank Werner: *A Stability Approach to Sequencing and Scheduling under Uncertainty*. In: Sequencing and Scheduling with Inaccurate Data, edited by Yuri Sotskov, Frank Werner, 01/2014: chapter 12: pages 283 - 343; Nova Science Publishers., ISBN: 978-1-62948-677-2

Frank Werner: *A Survey of Genetic Algorithms for Shop Scheduling Problems*. Heuristics: Theory and Applications, 1 edited by Patrick Siarry, 04/2013: chapter 8: pages 161 - 222; Nova Science Publishers, ISBN: 978-1-62417-637-1

Yuri Sotskov, Tsung-Chyan Lai, Frank Werner: *The Stability Box for Minimizing Total Flow Time under Uncertain Data*. Simulation and Modelling Methodologies, Technologies and Applications, Vol. 197, Part 2, 02/2013: pages 39-55; Springer.

Svetlana A Kravchenko, Frank Werner: *Minimizing a Regular Function on Uniform Machines with Ordered Completion Times*. Linear Programming - Theory and Applications, Early Preprint Version 02/2012: chapter 5: pages 159 - 173; Nova Science Publishers., ISBN: 978-1-61209-579-0

Michael Andresen, Heidemarie, Mathias Plauschin, Frank Werner: *Using Simulated Annealing for Open Shop Scheduling with Sum Criteria*. In: Simulated Annealing, In-The, 09/2008, ISBN: 978-953-7619-07-7

Heidemarie Bräsel, Frank Werner: *The job - shop problem - modelling by latin rectangles, exact and heuristic solution*. Proceedings of the 14th IFIP Conference, Lecture Notes Control Inf. Sciences, Vol. 143, 07/1990: pages 456-465;

Yuri N. Sotskov, Alexandre Dolgui, Nadezhda Sotskova, Frank Werner: *Stability of the Assembly Line Balance Optimality with A Fixed Station Number*. In: Supply Chain Optimization Product/Process Design , Facility Location and Flow Control, 1/2005: pages 135-149;

Jacek Blazewicz, Erwin Pesch, Malgorzata Sterna, Frank Werner: *Total Late Work Criteria for Shop Scheduling Problems*. Operations Research Proceedings 1999, Edited by K. Inderfurth, G. Schwödiauer, W. Domschke, F. Juhnke, P. Kleinschmidt, G. Wäscher, 06/2000: pages 354-359; Springer.

Yuri Sotskov, Vjacheslav Tanaev, Frank Werner: *On the Stability Radius of an Optimal Schedule: a Survey and Recent Developments*. Industrial Applications of Combinatorial Optimization, 01/1998: pages 72-108; Kluwer Academic Publishers., ISBN: 1441947970

Frank Werner: *Zur topologischen Struktur von Permutationsmengen*. Extremalaufgaben der optimalen Planung und Projektierung (in Russisch), 01/1991: pages 38 - 45; Institut für Technische Kybernetik Minsk / Belarus.

Journal Publications

Omid Gholami, Yuri N. Sotskov, Frank Werner: *A genetic algorithm for hybrid job-shop scheduling problems with minimizing the makespan or mean flow time*. Journal of Advanced Manufacturing Systems 07/2018; DOI:10.1142/S0219686718500269

Julia Lange, Frank Werner: *Approaches to modeling train scheduling problems as job-shop problems with blocking constraints*. Journal of Scheduling, Vol. 21, No. 2, 2018, 191 - 207; DOI:10.1007/s10951-017-0526-0

Frank Werner, Larysa Burtseva, Yuri N Sotskov: *Special Issue on Algorithms for Scheduling Problems*. Algorithms, 2018; 11(6)., DOI:10.3390/a11060087

Mohammad Mahdi Nasiri, Ali Rahbari, Frank Werner, Roya Karimi: *Incorporating supplier selection and order allocation into the vehicle routing and multi-cross-dock scheduling problem*. International Journal of Production Research, 2018; DOI:10.1080/00207543.2018.1471241

Vidblain Amaro, Arnolando Diaz-Ramirez, Brenda Flores-Rios, Fernando Gonzalez-Navarro, Frank Werner, Larysa Burtseva: *A Scheduling Extension Scheme of the Earliest Deadline First Policy For Hard Real-Time Uniprocessor Systems Integrated on POSIX Threads Based on Unix*. Computer Systems Science and Engineering 03/2018; 33(1).

Tsung-Chyan Lai, Yuri N Sotskov, Natalja G Egorova, Frank Werner: *The optimality box in uncertain data for minimizing the sum of the weighted job completion times*. International Journal of Production Research, 2017; DOI:10.1080/00207543.2017.1398426

Yuri Sotskov, Natalia Egorova, Frank Werner: *A Permutation with Maximum Parallelepiped Optimality of Service Requirements with Interval Durations (in Russian)*, Economics, Modelling, Forecasting, Vol. 11, Minsk, 104 - 116.

Andrzej Bozek, Frank Werner: *Flexible job shop scheduling with lot streaming and subplot size optimisation*. International Journal of Production Research, 2017; DOI:10.1080/00207543.2017.1346322

Eddy M. Delgado-Arana, Larysa Burtseva, Brenda Flores-Rios, Roberto Ibarra, Frank Werner: *A Batch Sequencing Model for a Semiconductor Packaging Company*. Engineering Letters, 2017; 25(2):205 - 213.

Yury Metelsky, Kseniya Schemeleva, Frank Werner: *A Finite Characterization and Recognition of Intersection Graphs of Hypergraphs with Rank at Most 3 and Multiplicity at Most 2 in the Class of Threshold Graphs*. Discussiones Mathematicae Graph Theory, 2017; 37(1):13 - 28., DOI:10.7151/dmgt.1916

- Alexander A Lazarev, Dmitry I Arkhipov, Frank Werner: *Scheduling Jobs with Equal Processing Times on a Single Machine: Minimizing Maximum Lateness and Makespan*. Optimization Letters, Vol. 11, No. 1m, 2017, 165 - 177; DOI:10.1007/s11590-016-1003-y
- Philippe Baptiste, Mikhail Y. Kovalyov, Yury L. Orlovich, Frank Werner, Igor E. Zverovich: *Graphs with maximal induced matchings of the same size*. Discrete Applied Mathematics; 216(Part I):15 - 28., DOI:10.1016/j.dam.2016.08.015
- Evgeny Gafarov, Alexandre Dolgui, Alexander Lazarev, Frank Werner: *A New Effective Algorithm to Solve an Investment Problem (in Russian)*. Avtomatika i Telemekhanika 09/2016;
- Evgeny Gafarov, Alexandre Dolgui, Alexander Lazarev, Frank Werner: *A New Effective Dynamic Program for an Investment Optimization Problem*. Automation and Remote Control 09/2016; 77(6):1633 - 1648., DOI:10.1134/S0005117916090101
- Alexander A. Lazarev, Dmitry I. Arkhipov, Frank Werner: *On a generalized single machine scheduling problem with time-dependent processing times*, IFAC Papers Online., Vol.49, No. 12,2016, 226 - 230; DOI:10.1016/j.ifacol.2016.07.603
- Dmitry Tsadikovich, Eugene Levner, Hanan Tell, Frank Werner: *Integrated demand-responsive scheduling of maintenance and transportation operations in military supply chains*. International Journal of Production Research Vol. 54, No. 19, 2016, 5798 - 5810; DOI:10.1080/00207543.2016.1178864
- Larysa Burtseva, Rainier Romero, Benjamin Valdez Salas, Frank Werner: *Recent advances on modelling of structures of multi-component mixtures using a sphere packing approach*. International Journal of Nanotechnology, 2016; Vol. 13(Nos. 1/2/3). DOI:10.1504/IJNT.2016.074522
- Dmitry Ivanov, Alexandre Dolgui, Boris Sokolov, Frank Werner: *Schedule robustness analysis with the help of attainable sets in continuous flow problem under capacity disruptions*. International Journal of Production Research, Vol. 54, No. 11, 2016, 3397 - 3413; DOI:10.1080/00207543.2015.1129467
- Keramat Hasani, Svetlana A. Kravchenko, Frank Werner: *Minimizing the Makespan for the Two-Machine Scheduling Problem with a Single Server: Two Algorithms for Very Large Instances*. Engineering Optimization, 2016; 48(1):173-183. DOI:10.1080/0305215X.2015.1005083
- Yuri Sotskov, Natalia Egorova, Frank Werner: *The Optimality Box of a Schedule Minimizing the Sum of the Weighted Completion Times of the Jobs (in Russian)*, Vesti NAN Blarus, Ser. Phys.-Mat. Sciences,. Vol. 4, 2015, 103 - 111.
- Yuri Sotskov, Natalia Egorova, Frank Werner: *Optimal Planning of Time Management with Interval Durations of the Activities (in Russian)*, Economics, Modelling,Forecasting, Vol. 9, 2015, 96 - 104.
- Keramat Hasani, Svetlana A Kravchenko, Frank Werner: *Minimizing Interference for Scheduling Two Parallel Machines with a Single Server*. International Journal of Production Research, Vol. 52, No.13, 2014,7148 - 7158.
- Yuri Sotskov, Natalja Matsveichuk, Andrei Kasiankou, Frank Werner: *Time Management Based on Two-Machine Flowshop Scheduling with Uncertain Processing Times*. International Journal Information Technologies & Knowledge. 2014; 8(3):212 - 224.

- Evgeny R. Gafarov, Alexandre Dolgui, Frank Werner: *A New Graphical Approach for Solving Single Machine Scheduling Problems Approximately*. International Journal of Production Research, Vol. 52, No. 13, 2014, 3762 - 3777.
- Dirk Briskorn, Erwin Pesch, Frank Werner: *New Developments in Scheduling and Manufacturing*. International Journal of Production Research; 52(13), 2017, 3755 - 3757.
- Keramat Hasani, Svetlana Kravchenko, Frank Werner: *Minimizing Total Weighted Completion Time Approximately for the Parallel Machine Problem with a Single Server*. Information Processing Letters, 2014; 114(2014):500-503.
- Keramat Hasani, Svetlana A. Kravchenko, Frank Werner: *Минимизация суммарного времени обслуживания для системы с двумя приборами и одним сервером (Minimizing Mean Flow Time for the Two-Machine Scheduling Problem with a Single Server)*. Информатика. 2014; 41(1):15-24.
- Nodari Vakhania, Jose Alberto Hernandez, Frank Werner: *Scheduling Unrelated Machines with Two Types of Jobs*. International Journal of Production Research, Vol. 52, No. 13, 2014, 3778 – 3801.;
- Keramat Hasani, Svetlana A. Kravchenko, Frank Werner: *A Hybridization of Harmony Search and Simulated Annealing to Minimize Mean Flow Time for the Two-Machine Scheduling Problem with a Single Server*. International Journal of Operational Research / Nepal, 2014; 3(1):9 - 26.
- Evgeny R. Gafarov, Alexander A. Lazarev, Frank Werner: *Approximability results for the resource-constrained project scheduling problem with a single type of resources*. Annals of Operations Research, Vol. 213, No. 1, 2014, 115 – 130.
- Keramat Hasani, Svetlana A. Kravchenko, Frank Werner: *Simulated annealing and genetic algorithms for the two-machine scheduling problem with a single server*. International Journal of Production Research, Vol. 52, No. 13, 2014, 3778 – 3792.
- Evgeny R. Gafarov, Alexandre Dolgui, Alexander A. Lazarev, Frank Werner: *A Graphical Algorithm to Solve an Investment Optimization Problem*. Journal of Mathematical Modelling and Algorithms in Operations Research. Vol. 13, No. 4, 2014, 597 – 614.
- Keramat Hasani, Svetlana A. Kravchenko, Frank Werner: *Block Models for Scheduling Jobs on Two Parallel Machines with a Single Server*. Computers & Operations Research, 2014; 41(1):94 - 97.
- Lester Carballo, Nodari Vakhania, Frank Werner: *Reducing efficiently the search tree for multiprocessor job-shop scheduling problems*. International Journal of Production Research, 2013; 51(23 - 24):7105 - 7119.
- Nodari Vakhania, Frank Werner: *Minimizing maximum lateness of jobs with naturally bounded job data on a single machine in polynomial time*. Theoretical Computer Science, 2013; 501:72 - 81.
- Svetlana A. Kravchenko, Frank Werner: *Erratum to 'Minimizing Total Tardiness on Parallel Machines with Preemptions'*. Journal of Scheduling, 2013; 16(4):439 - 441.
- Evgeny R. Gafarov, Alexander A. Lazarev, Frank Werner: *Single machine total tardiness maximization problems: Complexity and algorithms*. Annals of Operations Research, 2013; Vol. 207(No. 1):121 - 136.
- Yuri N. Sotskov, Tsung-Chyan Lai, Frank Werner: *Measures of problem uncertainty for scheduling with interval processing times*. Operations Research-Spektrum, 2013; 35(3):659 - 689.

- Evgeny Gafarov, Alexander Lazarev, Frank Werner: *A note on the paper 'Single machine scheduling problems with financial resource constraints: Some complexity results and properties' by E.R. Gafarov et al.*. Mathematical Social Sciences, 2013; 65(3):232.
- Adam Janiak, Wladyslaw Janiak, Mikhail Y. Kovalyov, Frank Werner: *Soft due window assignment and scheduling of unit-time jobs on parallel machines*. 4OR quarterly journal of the Belgian, French and Italian Operations Research Societies, 2012; 10(4):347 - 360.
- Alexander Lazarev, Vincent T'Kindt, Frank Werner: *Scheduling in Manufacturing Systems, Guest Editorial*. Computers & Operations Research, 2012; 39(6):1195 - 1196.
- Svetlana A. Kravchenko, Frank Werner: *Minimizing Total Tardiness on Parallel Machines with Preemptions*. Journal of Scheduling, 2012; 15(2):193 - 200.
- Nodari Vakhania, Frank Werner: *A Combinatorial Approximation Algorithm for Selecting the Gate Sizes from Finite Sets in VLSI Circuits*. International Journal of Operational Research Nepal. 2012; 1(1):33 - 48.
- Evgeny R. Gafarov, Alexander A. Lazarev, Frank Werner: *Transforming a pseudo-polynomial algorithm for the single machine total tardiness maximization problem into a polynomial one*. Annals of Operations Research, 2012; 196(1).
- Evgeny R. Gafarov, Alexander A. Lazarev, Frank Werner: *A note on a single machine scheduling problem with generalized total tardiness objective function..* Information Processing Letters 01/2012; 112:72-76.
- Alexander A. Lazarev, Vincent T'Kindt, Frank Werner: *Guest Editorial..* Computers & OR., 2012; 39:1195-1196.
- Frank Werner: *GENETIC ALGORITHMS FOR SHOP SCHEDULING PROBLEMS: A SURVEY*. Preprint Series FMA, OvGU Magdeburg. 2011; 11 - 31:1-66.
- Evgeny R. Gafarov, Alexander A. Lazarev, Frank Werner: *Single machine scheduling problems with financial resource constraints: Some complexity results and properties..* Mathematical Social Sciences, 2011; 62:7-13.
- Svetlana A. Kravchenko, Frank Werner: *Parallel machine problems with equal processing times: a survey*. Journal of Scheduling, 2011; 14:435-444.
- Natalia M. Matsveichuk, Yuri N. Sotskov, Frank Werner: *The dominance digraph as a solution to the two-machine flow-shop problem with interval processing times*. Optimization, 2011; 60(12):1493-1517.
- Irina V Gribkovskaia, Sergey Kovalev, Frank Werner: *Batching Work and Rework Processes on Dedicated Facilities to Minimize the Makespan*. Omega 12/2010; 38(6):522 - 527.
- Frank Werner, Svetlana A Kravchenko: *Optimal Scheduling for Multiserver Processing Systems*. Automation and Remote Control 10/2010; 71(10):2109 - 2121.
- Frank Werner, Alexander Lazarev: *Preface to the Special Issue of Automatika i Telemekhanika Dedicated to the 70th Anniversary of Academician V.S: Tanaev*. Automation and Remote Control 10/2010; 71(10):2019 - 2020.
- Svetlana A Kravchenko, Frank Werner: *Preemptive Scheduling on Uniform Machines to Minimize Mean Flow Time*. Computers & Operations Research 10/2010; 36(10):2816 - 2821.

- Frank Werner, Alexander Lazarev: *Foreword to the thematical issue devoted to the seventieth anniversary of Academician V.S. Tanaev*. Automation and Remote Control 01/2010; 71(10):2019-2020.
- Frank Werner, Svetlana A. Kravchenko: *Scheduling with multiple servers*. Automation and Remote Control, 2010; 71(10):2109-2121.
- Yuri N. Sotskov, Natalia G. Egorova, Frank Werner: *Minimizing total weighted completion time with uncertain data: A stability approach*. Automation and Remote Control, 2010; 71(10):2038-2057.
- Jitti Jungwattanakit, Manop Reodecha, Paveena Chaovalitwongse, Frank Werner: *A comparison of scheduling algorithms for flexible flow shop problems with unrelated parallel machines, setup times, and dual criteria*. Computers & Operations Research, Vol. 36, No. 2, 2009, 358 - 378
- Gerd Finke, Vitaly Strusevich, Frank Werner: *Scheduling for Modern Manufacturing, Logistics and Supply Chains, Guest Editorial*. Computers & Operations Research, 2009; 36(2):299 - 300.
- Alexander A. Lazarev, Frank Werner: *A graphical realization of the dynamic programming method for solving NP-hard combinatorial problems*. Computers & Mathematics with Applications, 2009; 58:619-631.
- Yury Orlovich, Valery Gordon, Frank Werner, Alexandre Dolgui, Gerd Finke: *Complexity of Dissociation Set Problems in Some Hereditary Classes of Graphs (in Russian)*. Doklady National Academy of Science Belarus. 2009; 53(3):16 - 20.
- Alexander A. Lazarev, Frank Werner: *Algorithms for special cases of the single machine total tardiness problem and an application to the even-odd partition problem*. Mathematical and Computer Modelling, 2009; Vol. 49, No. 9 - 10, 2061 - 2072.
- Svetlana A. Kravchenko, Frank Werner: *On a parallel machine scheduling problem with equal processing times*. Discrete Applied Mathematics, 2009; 157:848-852.
- Svetlana A. Kravchenko, Frank Werner: *Minimizing the number of machines for scheduling jobs with equal processing times*. European Journal of Operational Research, 2009; 199(2):595-600.
- Heidemarie Bräsel, André Herms, Marc Mörig, Thomas Tautenhahn, Jan Tusch, Frank Werner: *Heuristic constructive algorithms for open shop scheduling to minimize mean flow time*. European Journal of Operational Research, 2008; 189(3):856-870.
- Valery S. Gordon, Yury L. Orlovich, Frank Werner: *Hamiltonian properties of triangular grid graphs*. Discrete Mathematics, 2008; 308:6166-6188.
- Michael Andresen, Heidemarie Bräsel, Marc Mörig, Jan Tusch, Frank Werner, Per Willenius: *Simulated annealing and genetic algorithms for minimizing mean flow time in an open shop*. Mathematical and Computer Modelling, 2008; 48:1279-1293.
- Yuri N Sotskov, Natalja G Egorova, Tsung-Chyan Lai, Frank Werner, Roosevelt Rd: *Sequence-Dependent Setup Times in a Two-Machine Job-Shop with Minimizing the Schedule Length*. International Journal of Operations Research. 2008; 5:68-77.
- Jacek Blazewicz, Erwin Pesch, Malgorzata Sterna, Frank Werner: *Metaheuristic approaches for the two-machine flow-shop problem with weighted late work criterion and common due date*. Computers & Operations Research, 2008; 35:574-599.

- Jitti Jungwattanakit, Manop Reodecha, Paveena Chaovalitwongse, Frank Werner: *Algorithms for Flexible Flow Shop Problems with Unrelated Parallel Machines, Setup Times and Dual Criteria*. International Journal of Advanced Manufacturing Technology, 2008; 37:354 - 370.
- Peter Brucker, Yu N. Sotskov, Frank Werner: *Complexity of shop-scheduling problems with fixed number of jobs: a survey*. Mathematical Methods of Operational Research, 2007; 65(3):461-481.
- Karl Inderfurth, Mikhail Y. Kovalyov, C.T. Ng, Frank Werner: *Cost minimizing scheduling of work and rework processes on a single facility under deterioration of reworkables*. International Journal of Production Economics, 2007; 105(2):345-356.
- Mikhail Y. Kovalyov, Frank Werner: *Problem F2 | | Cmax with forbidden jobs in the first or last position is easy*. European Journal of Operational Research, 2007; 177(2):1310-1311.
- Jacek Blazewicz, Erwin Pesch, Malgorzata Sterna, Frank Werner: *A note on the two machine job shop with the weighted late work criterion..* Journal of Scheduling, 2007; 10:87-95.
- Mikhail Y. Kovalyov, Frank Werner: *Problem F2//Cmax with Forbidden Jobs I the First or Last Position is Easy*. European Journal of Operational Research. 2007; 177:1310-1311.
- Karl Inderfurth, Adam Janiak, Mikhail Y. Kovalyov, Frank Werner: *Batching work and rework processes with limited deterioration of reworkables*. Computers & Operations Research, Vol. 33, No. 6, 2006, 1595 – 1605.
- Frank Werner: *Book Review: Michael L. Pinedo (2005): ISBN 0-387-22198-0, Springer, New York*. Mathematical Methods of Operational Research, 2006; 63(1):187-189.
- Frank Werner: *Book Review: Multicriteria Scheduling. Theory, Models and Algorithms, V. T'Kindt, J.C. Billaut. Springer Verlag (2002), 303 pp., EUR 74.95, ISBN: 3-540-43617-0*. European Journal of Operational Research, 2006; 168(1):275–277.
- Jacek Blazewicz, Erwin Pesch, Malgorzata Sterna, Frank Werner: *A comparison of solution procedures for two-machine flow shop scheduling with late work criterion*. Computers & Industrial Engineering, 2005; 49(4):611-624.
- Adam Janiak, Mikhail Y. Kovalyov, Wieslaw Kubiak, Frank Werner: *Positive half-products and scheduling with controllable processing times*. European Journal of Operational Research, 2005; 165(2):416-422.
- Yury Orlovich, Valery Gordon, Frank Werner: *Hamiltonian Cycles in Graphs of a Triangular Grid*. Doklady National Academy of Science Belarus. 2005; 49(5):21 - 25.
- Jacek Błażewicz, Erwin Pesch, Małgorzata Sterna, Frank Werner: *Two-machine flow shop scheduling problem with weighted late work criterion and common due date*. European Journal of Operational Research, 2005; 165(2):408-415.
- Volker Lauff, Frank Werner: *Heuristics for Two-Machine Flow Shop Problems with Earliness and Tardiness Penalties*. International Journal of Operations and Quantitative Management.2004; 10(2):125 - 144.
- Volker Lauff, Frank Werner: *On the Complexity and Some Properties of Multi-Stage Scheduling Problems with Earliness and Tardiness Penalties*. Computers & Operations Research, 2004; 31(3):317 - 345.
- Jatinder N. D. Gupta, Volker Lauff, Frank Werner: *Two-Machine Flow Shop Scheduling with Nonregular Criteria..* Journal of Mathematical Modelling and Algorithms, 2004; 3:123-151.

- Tsung-Chyan Lai, Y.N. Sotskov, N.Y. Sotskova, F. Werner: *Mean flow time minimization with uncertain processing times*. European Journal of Operational Research, 2004; 159:558-573.
- Jacek Blazewicz, Erwin Pesch, Malgorzata Sterna, Frank Werner: *Open shop scheduling problems with late work criteria*.. Discrete Applied Mathematics, 2004; 134:1-24.
- Volker Lauff, Frank Werner: *Scheduling with common due date, earliness and tardiness penalties for multimachine problems: A survey*.. Mathematical and Computer Modelling, 2004; 40:637-655.
- Tsung-Chyan Lai, Y.N. Sotskov, N.Y. Sotskova, F. Werner: *Mean Flow time minimization with given bounds of processing times*. European Journal of Operational Research, 2004; 159:558-573.
- Jatinder N. D. Gupta, Frank Werner, Gunnar Wulkenhaar: *Two-machine open shop scheduling with secondary criteria*. International Transactions in Operational Research, 2003; 10(3):267 - 294.
- Peter Brucker, Clarisse Dhanens-Flipo, Sigrid Knust, Svetlana Kravchenko, Frank Werner: *Complexity results for Parallel Machine Scheduling with a Single Server*. Journal of Scheduling, 2002; 5(6):429 - 457.
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