OTTO VON GUERICKE UNIVERSITÄT MAGDEBURG

MATH FAKULTÄT FÜR MATHEMATIK

# Publikationsbericht 2019

## Institut für Mathematische Optimierung

# INSTITUT FÜR MATHEMATISCHE OPTIMIERUNG

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## 1. LEITUNG

Prof. Dr. Sebastian Sager (geschäftsführender Leiter)
Prof. Dr. Volker Kaibel

## 2. VERÖFFENTLICHUNGEN

### BEGUTACHTETE ZEITSCHRIFTENAUFSÄTZE

**Chung, Tsuiping; Gupta, Jatinder N. D.; Zhao, Haidan; Werner, Frank**
Minimizing the makespan on two identical parallel machines with mold constraints
Computers & operations research: an international journal - Amsterdam [u.a.]: Elsevier, Bd. 105.2019, S. 141-155;
[Imp.fact.: 2.962]

**Dey, Arindam; Agarwal, Aayush; Dixit, Pranav; Long, Hoang Viet; Werner, Frank**
A genetic algorithm for total graph coloring
Journal of intelligent & fuzzy systems - New York, NY: John Wiley & Sons, S. 1-8, 2019;
[Online first]
[Imp.fact.: 1.637]

**Dolgui, Alexandre; Ivanov, Dmitry; Potryasaev, Semyon; Sokolov, Boris; Ivanova, Marina; Werner, Frank**
Blockchain-oriented dynamic modelling of smart contract design and execution in the supply chain
International journal of production research - London [u.a.]: Taylor & Francis, S. 1-16, 2019;
[Online first]
[Imp.fact.: 2.623]

**Gafarov, Evgeny; Werner, Frank**
Two-machine job-shop scheduling with equal processing times on each machine
Mathematics - Basel: MDPI, Bd. 7.2019, 3, S. 301;

**Golami, O.; Sotskov, Y. N.; Werner, Frank; Zatsiupa, A. S.**
Heuristic algorithms to maximize revenue and the number of jobs processed on parallel machines
Automation and remote control - Dordrecht [u.a.]: Springer Science + Business Media B.V, Bd. 80.2019, 2, S. 297-316;
[Imp.fact.: 0.562]

**Golami, Omid; Sotskov, Yuri; Werner, Frank; Zatsiupa, Aksana**
vristieskie algoritmy dlja maksimizacii dochoda i koliestva trebovanij, obsluivaemych na parallelnych priborach
New York, NY// Pleiades Publ, Bd. 2.2019, S. 125-151

**Golami, Omid; Sotskov, Yuri; Werner, Frank; Zatsiupa, Aksana**
vristieskie algoritmy dlja maksimizacii dochoda i koliestva trebovanij, obsluivaemych na parallelnych priborach
Avtomatika i telemechanika - Moskva, Bd. 2.2019, S. 125-151

**Hamid, Mahdi; Nasiri, Mohammad Mahdi; Werner, Frank; Sheikhahmadi, Farrokh; Zhalechian, Mohammad**
Operating room scheduling by considering the decision-making styles of surgical team members - a comprehensive approach
Computers & operations research - Amsterdam [u.a.]: Elsevier, Bd. 108.2019, S. 166-181;
[Imp.fact.: 2.962]

**Jost, Felix; Schalk, Enrico; Rinke, Kristine; Fischer, Thomas; Sager, Sebastian**
Mathematical models for cytarabine-derived myelosuppression in acute myeloid leukaemia
PLOS ONE - San Francisco, California, US: PLOS, Volume 14.2019, 7, article e0204540, insgesamt 26 Seiten;
[Imp.fact.: 2.776]

**Lange, Julia; Werner, Frank**
On neighborhood structures and repair techniques for blocking job shop scheduling problems
Algorithms - Basel, Bd. 12.2019, 11, S. 242;

**Pavlov, Alexander; Ivanov, Dmitry; Werner, Frank; Dolgui, Alexandre; Sokolov, Boris**
Integrated detection of disruption scenarios, the ripple effect dispersal and recovery paths in supply chains
Annals of operations research - Dordrecht [u.a.]: Springer Science + Business Media B.V, insges. 23 S., 2019;
[Imp.fact.: 2.284]

**Rahbari, Ali; Nasiri, Mohammad Mahdi; Werner, Frank; Musavi, MirMohammad; Jolai, Fariborz**
The vehicle routing and scheduling problem with cross-docking for perishable products under uncertainty - two robust bi-objective models
Applied mathematical modelling: simulation and computation for engineering and environmental systems - Amsterdam [u.a.]: Elsevier Science, Bd. 70.2019, S. 605-625;
[Imp.fact.: 2.617]

**Ungson, Yamel; Burtseva, Larysa; Garcia-Curiel, Edwin; Valdez Salas, Benjamin; Flores-Rios, Brenda; Werner, Frank; Petranovskii, Vitalii**
Correction: Ungson, Y. et al. Filling of Irregular Channels with Round Cross-Section: Modeling Aspects to Study the Properties of Porous Materials. Materials 2018, 11, 1901
Materials - Basel: MDPI, Bd. 12.2019, 5, S. 818;
[Imp.fact.: 2.467]

**Werner, Frank**
Discrete optimization - theory, algorithms, and applications
Mathematics - Basel: MDPI, Bd. 7.2019, 5, S. 397;

## NICHT BEGUTACHTETE ZEITSCHRIFTENAUFSÄTZE

**Lazarev, Alexander A.; Lemtyuzhnikova, Darya V.BVerfasserIn; Werner, Frank**
A general approximation approach for multi-machine scheduling problems with minimizing the maximum penalty
Magdeburg: Universität, Fakultät für Mathematik, 2019, 25 Seiten - (Preprint; Fakultät für Mathematik, Otto-von-Guericke-Universität Magdeburg; 2019,Nr.4);
[Literaturangaben: Seite 23-25]

## DISSERTATIONEN

**Friesen, Mirjam; Kaibel, Volker [AkademischeR BetreuerIn]**
Extended formulations for higher order polytopes in combinatorial optimization
Magdeburg, 2019, viii, 96 Seiten, Diagramme, 30 cm;
[Literaturverzeichnis: Seite 89-92]

**Keller, Wolfgang; Kaibel, Volker [AkademischeR BetreuerIn]**
Tightening the Chvátal and split operator via low-codimensional lineality spaces
Magdeburg, 2019, 364 Seiten, Diagramme, 30 cm;
[Literaturverzeichnis: Seite 361-364]

**Lange, Julia; Werner, Frank [AkademischeR BetreuerIn]**
Solution techniques for the blocking job shop scheduling problem with total tardiness minimization
Magdeburg, 2019, xxxi, 241 Seiten, Diagramme, 24 cm;
[Literaturverzeichnis: Seite 229-241]

**Zawisza, Jacek; Lüder, Arndt [AkademischeR BetreuerIn]; Werner, Frank [AkademischeR BetreuerIn]**
Entwicklung und Integration interdependenter Agentensysteme zur dezentralen Produktionsplanung und -steuerung
Magdeburg, 2018, XIX, 269 Seiten, Diagramme, 30 cm;
[Literaturverzeichnis: Seite 219-250]