OTTO VON GUERICKE UNIVERSITÄT MAGDEBURG

MATH FAKULTÄT FÜR MATHEMATIK

Publikationsbericht 2023

Institut für Mathematische Optimierung

INSTITUT FÜR MATHEMATISCHE OPTIMIERUNG

1. LEITUNG

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

2. VERÖFFENTLICHUNGEN

BEGUTACHTETE ZEITSCHRIFTENAUFSÄTZE

Behmanesh-Fard, Navid; Yazdanjouei, Hossein; Shokouhifar, Mohammad; Werner, Frank
Mathematical circuit root simplification using an ensemble heuristicmetaheuristic algorithm
Mathematics - Basel : MDPI, Bd. 11 (2023), Heft 6, Artikel 1498, insges. 22 S.
[Imp.fact.: 2.4]

Bürger, Adrian; Zeile, Clemens; Altmann-Dieses, Angelika; Sager, Sebastian; Diehl, Moritz
A Gauss-Newton-based decomposition algorithm for nonlinear mixed-integer optimal control problems
Automatica - Amsterdam [u.a.]: Elsevier, Pergamon Press, Bd. 152 (2023), Artikel 110967, insges. 9 S.
[Imp.fact.: 6.4]

Chen, Mo; Werner, Frank; Shokouhifar, Mohammad
Mathematical modeling and exact optimizing of university course scheduling considering preferences of professors
Axioms - Basel : MDPI, Bd. 12 (2023), Heft 5, Artikel 498, insges. 17 S.
[Imp.fact.: 2.0]

Garg, Vanita; Deep, Kusum; Alnowibet, Khalid Abdulaziz; Mohamed, Ali Wagdy; Shokouhifar, Mohammad; Werner, Frank
LX-BBSCA - Laplacian biogeography-based sine cosine algorithm for structural engineering design optimization
AIMS mathematics - Springfield, MO : AIMS Press, Bd. 8 (2023), Heft 12, S. 30610-30638
[Imp.fact.: 2.2]

Gebhard, Anna; Lilienthal, Patrick; Metzler, Markus; Rauh, Manfred; Sager, Sebastian; Schmiegelow, Kjeld; Toksvang, Linea Natalie; Zierk, Jakob
Pharmacokinetic-pharmacodynamic modeling of maintenance therapy for childhood acute lymphoblastic leukemia
Scientific reports - [London]: Macmillan Publishers Limited, part of Springer Nature, Bd. 13 (2023), Heft 1, Artikel 11749, insges. 15 S.
[Imp.fact.: 4.6]

Hahn, Mirko; Leyffer, Sven; Sager, Sebastian
Binary optimal control by trust-region steepest descent
Mathematical programming - Berlin : Springer, Bd. 197 (2023), S. 147-190
[Imp.fact.: 3.06]

Lobe, Elisabeth; Kaibel, Volker
Optimal sufficient requirements on the embedded Ising problem in polynomial time
Quantum information processing - Dordrecht : Springer Science + Business Media B.V., Bd. 22 (2023), Heft 8, Artikel 305, insges. 44 S.
[Imp.fact.: 2.5]

Manns, Paul; Hahn, Mirko; Kirches, Christian; Leyffer, Sven; Sager, Sebastian
On convergence of binary trust-region steepest descent
Journal of nonsmooth analysis and optimization - Essen : Christian Clason, Fakultät für Mathematik, Universität Duisburg-Essen, Bd. 4 (2023), Artikel 10164, insges. 26 S.

Reimann, Adrian-Manuel; Schalk, Enrico; Jost, Felix; Mougiakakos, Dimitrios; Weber, Daniela; Döhner, Hartmut; Recher, Christian; Dumas, Pierre-Yves; Ditzhaus, Marc; Fischer, Thomas; Sager, Sebastian
AML consolidation therapy - timing matters
Journal of cancer research and clinical oncology - Berlin : Springer, Bd. 149 (2023), Heft 15, S. 13811-13821
[Imp.fact.: 3.6]

Sager, Sebastian
Digital twins in oncology
Journal of cancer research and clinical oncology - Berlin : Springer, Bd. 149 (2023), Heft 9, S. 5475-5477
[Imp.fact.: 3.6]

Shokouhifar, Mohammad; Sohrabi, Mahnaz; Rabbani, Motahareh; Molana, Seyyed Mohammad Hadji; Werner, Frank
Sustainable phosphorus fertilizer supply chain management to improve crop yield and P use efficiency using an ensemble heuristicmetaheuristic optimization algorithm
Agronomy - Basel : MDPI, Bd. 13 (2023), Heft 2, Artikel 565, insges. 31 S.
[Imp.fact.: 3.7]

Werner, Frank
Special Issue "Scheduling: Algorithms and Applications"
Algorithms - Basel : MDPI, Bd. 16 (2023), Heft 6, Artikel 268, insges. 3 S.
[Imp.fact.: 2.3]

Zabihian-Bisheh, Abded; Vandchali, Hadi Rezaei; Kayvanfar, Vahid; Werner, Frank
A sustainable multi-objective model for the hazardous waste location-routing problem - a real case study
Sustainable Operations and Computers - [Erscheinungsort nicht ermittelbar]: KeAi Communications Co. Ltd. . - 2023, insges. 34 S.
[Imp.fact.: 8.1]

NICHT BEGUTACHTETE ZEITSCHRIFTENAUFSÄTZE

Behmanesh-Fard, Navid; Yazdanjouei, Hossein; Shokouhifar, Mohammad; Werner, Frank
Mathematical root simplification in operational amplifiers using an ensemble heuristic-metaheuristic algorithm
Basel: MDPI, 2023, 1 Online-Ressource - (MDPI Preprints)

Chen, Mo; Werner, Frank; Shokouhifar, Mohammad
Mathematical modeling and exact optimizing of university course scheduling considering preferences of professors
Preprints - Basel : MDPI AG . - 2023, insges. 8 S.

Elidrissi, Abdelhak; Banmansour, Rachid; Hasani, Keramat; Werner, Frank
Scheduling on parallel machines with a common server in charge of loading and unloading operations
De.arxiv.org - [S.l.]: Arxiv.org . - 2023, Artikel 2306.16669, insges. 40 S.

Gafarov, Evgeny R.; Werner, Frank
Connected and autonomous vehicle scheduling problems - some models and algorithms
De.arxiv.org - [S.l.]: Arxiv.org . - 2023, Artikel 2304.01806, insges. 8 S.

Garg, Vanita; Deep, Kusum; Alnowibet, Khalid Abdudaziz; Wagdy Mohamed, Ali; Shokouhifar, Mohammad; Werner, Frank
Ensemble laplacian biogeography-based sine cosine algorithm for structural engineering design optimization problems
De.arxiv.org - [S.l.]: Arxiv.org . - 2023, Artikel 2310.05159, insges. 25 S.

Kaur, Puneet; Kaur, Kiranbir; Singh, Kuldeep; Bharany, Salil; Almazyad, Abdulaziz S.; Xiong, Guojiang; Wagdy Mohamed, Ali; Shokouhifar, Mohammad; Werner, Frank
Acoustic monitoring in underwater wireless sensor networks using energy-efficient artificial fish swarm-based clustering protocol (EAFSCP)
Preprints - Basel : MDPI AG . - 2023, insges. 19 S.

Shokouhifar, Mohammad; Hasanvand, Mohamad; Moharamkhani, Elaheh; Werner, Frank
EHMFFL: Ensemble Heuristic-Metaheuristic Feature Fusion Learning Algorithm for Heart Disease Diagnosis
Preprints - Basel : MDPI AG . - 2023, insges. 24 S.

BEGUTACHTETE BUCHBEITRÄGE

Martensen, Carl Julius; Plate, Christoph; Keßler, Tobias; Kunde, Christian; Kaps, Lothar; Kienle, Achim; Seidel-Morgenstern, Andreas; Sager, Sebastian
Towards machine learning of power-2-methanol processes
Computer aided chemical engineering - Amsterdam [u.a.]: Elsevier, Bd. 52 (2023), S. 561-568

HERAUSGEBERSCHAFTEN

Wagner, Gerd; Werner, Frank; De Rango, Floriano
Proceedings of the 13th International Conference on Simulation and Modeling Methodologies, Technologies and Applications. Volume 1
Scitepress, 2023, 1 Online Ressource, ISBN: 978-989-758-668-2 Kongress: SIMULTECH 2023 13 Rome, Italy 2023.07.12-14

Wagner, Gerd; Werner, Frank; De Rango, Floriano
Simulation and Modeling Methodologies, Technologies and Applications - 12th International Conference, SIMULTECH 2022, Lisbon, Portugal, July 14–16, 2022, Revised Selected Papers
Cham: Imprint: Springer, 2023., 1 Online-Ressource(XII, 222 p. 96 illus., 76 illus. in color.) - (Lecture Notes in Networks and Systems; 780), ISBN: 978-3-031-43824-0

Wagner, Gerd; Werner, Frank; Oren, Tuncer; De Rango, Floriano
Simulation and Modeling Methodologies, Technologies and Applications - International Online Conference (SIMULTECH 2021)
Cham: Imprint: Springer, 2023., 1 Online-Ressource(XII, 225 p. 144 illus., 129 illus. in color.) - (Lecture Notes in Networks and Systems; 601), ISBN: 978-3-031-23149-0

Werner, Frank
Scheduling - algorithms and applications
Basel: MDPI, 2023, 1 Online-Ressource (ix, 264 Seiten), ISBN: 978-3-0365-8277-1

DISSERTATIONEN

Ardalani, Ali; Pott, Alexander [AkademischeR BetreuerIn]; Kaibel, Volker [AkademischeR BetreuerIn]
Contributions to the theory of Costas arrays
Magdeburg: Universitätsbibliothek, Dissertation Otto-von-Guericke-Universität Magdeburg, Fakultät für Mathematik 2023, 1 Online-Ressource (xiii, 147 Seiten, 10,24 MB) ;
[Literaturverzeichnis: Seite 141-147]

Frede, Jonas; Kaibel, Volker [AkademischeR BetreuerIn]
Cyclic transversal polytopes
Magdeburg: Universitätsbibliothek, Dissertation Otto-von-Guericke-Universität Magdeburg, Fakultät für Mathematik 2023, 1 Online-Ressource (I, 138 Seiten, 685.07 kB) ;
[Literaturverzeichnis: Seite 135-138]