

Lebenslauf

Prof. Dr. Stefan Nickel



Karlsruher Institut für Technologie (KIT)
Fakultät für Wirtschaftswissenschaften
Institut für Operations Research – Diskrete Optimierung und Logistik

Karlsruhe Service Research Institute (KSRI)

Forschungszentrum Informatik, Karlsruhe (FZI)

Persönliche Daten

Geburtsdatum und -ort: 17. Juli 1966 in Frankfurt am Main

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Fremdsprachen: Englisch, Französisch, Spanisch

Wissenschaftlicher Werdegang

- Seit 2023** **Forschungszentrum Informatik (FZI), Karlsruhe**
Mitglied des Vorstandes
- Seit 2011** **Karlsruhe Service Research Institute (KSRI), Karlsruhe**
Direktor
- Seit 2011** **Forschungszentrum Informatik (FZI), Karlsruhe**
Direktor
- Seit 2009** **Karlsruher Institut für Technologie (KIT)**
Fakultät für Wirtschaftswissenschaften
Institut für Operations Research
Lehrstuhlinhaber für Diskrete Optimierung und Logistik
- 2004 – 2016** **Fraunhofer Institut für Techno- und Wirtschaftsmathematik**
Mitglied im Scientific Advisory Board
- 2001 – 2016** **Fraunhofer Institut für Techno- und Wirtschaftsmathematik**
Mitglied des Führungskreises
- 2003 – 2009** **Universität Saarbrücken**
Rechts- und Wirtschaftswissenschaftliche Fakultät
Lehrstuhlinhaber für Operations Research und Logistik
- 2001 – 2003** **Universität Kaiserslautern**
Fachbereich Mathematik
Mitglied des DFG-Graduiertenkollegs „Mathematik und Praxis“
- 1999 – 2003** **Universität Kaiserslautern**
Fachbereich Mathematik
Privatdozent
- 1998 – 2004** **Fraunhofer Institut für Techno- und Wirtschaftsmathematik**
Leiter der Abteilung Optimierung
- 1997 – 1998** **Fraunhofer Institut für Techno- und Wirtschaftsmathematik**
Berater
- 1995 – 1999** **Universität Kaiserslautern**
Fachbereich Mathematik
Wissenschaftlicher Assistent
- 1992 - 1995** **Universität Kaiserslautern**
Fachbereich Mathematik
Wissenschaftlicher Mitarbeiter
- 1990 – 1992** **Universität Kaiserslautern**
Fachbereich Mathematik
Wissenschaftliche Hilfskraft
- 1989 – 1992** **Universität Kaiserslautern**
Fachbereich Sozial- und Wirtschaftswissenschaften
Wissenschaftliche Hilfskraft

Studium

- 1999** **Universität Kaiserslautern**
Habilitation
Habilitationsschrift: „Geometric Approaches to Non-convex and Multikriteria Optimization Problems“
Gutachter: H. W. Hamacher, M. Labbé, H. Noltemeier, R. Wets
- 1995** **Universität Kaiserslautern**
Promotion (Dr. rer. nat.)
Dissertation: „Discretization of Planar Location Problems“
Gutachter: H. W. Hamacher, G. Wanka
- 1992** **Universität Kaiserslautern**
Diplom in Wirtschaftsmathematik (Dipl. math. Oec.)
Diplomarbeit: „Restriktive Standortplanung“
Gutachter: H. W. Hamacher
- 1989** **Universität Kaiserslautern**
Vordiplom in Wirtschaftsmathematik

Abgelehnte Rufe an andere Universitäten

- 2012** **RWTH Aachen**

Auszeichnungen

- 2016** **KIT-Fakultätslehrpreis** für außerordentliche Lehre insbesondere in den Lehrveranstaltungen „*Taktisches und operatives Supply Chain Management*“ und „*Standortplanung und strategisches Supply Chain Management*“
- 2012** **EURO Award**
The Association of European Operational Research Societies
- 2011** **Top Cited Article 2007 – 2011**
Elsevier European Journal of Operational Research
- 1997** **Universität Kaiserslautern**
Fachbereich Mathematik, Preis für die beste Vorlesung im Grundstudium für „*Mathematik für Informatiker I: Lineare Algebra*“, WS 1996/97
- 1993** **Kreissparkassenstiftung**
Preis für die Diplomarbeit „*Restriktive Standortprobleme*“
- 1992** **Deutsche Mathematiker Vereinigung (DMV)**
Preis der Deutschen Mathematiker Vereinigung, Studentenkonferenz

Mitgliedschaften in Wissenschaftsorganisationen

- Gesellschaft für Operations Research e.V. (GOR)
- Mathematical Programming Society (MPS)
- Institute for Operations Research and the Management Sciences (INFORMS)
- European Working Group on Locational Analysis (EWGLA)
- College on Locational Analysis

Dissertationen und Abschlussarbeiten

Abgeschlossene Dissertationen

- | | |
|------|---|
| 2024 | Hannah Bakker: „On the interplay between data and decisions in discrete location problems“ |
| 2023 | Martin Pouls: „Real-Time Optimization for Dynamic Ride Sharing“ |
| 2023 | David Olave Rojas: „The challenge of dispatching the right ambulance“ |
| 2022 | Markus Schinle: „Methoden und Werkzeuge für eine datengetriebene Entwicklung digitaler Gesundheitsanwendungen“ |
| 2021 | Anne Zander: „Demand and Capacity Management für Medical Practices“ |
| 2021 | Andreas Aschauer: „Optimal Scheduling in a Hot Rolling Mill for Refractory Metals“ |
| 2021 | Michael Hegemann: „Ein Entscheidungsunterstützungssystem zur Priorisierung ungeplanter Stillstände für eine ausbringungsoptimierte Durchführung reaktiver sowie proaktiver Instandhaltungsmaßnahmen“ |
| 2020 | Andreas Kuhnle: „Adaptive Order Dispatching based on Reinforcement Learning-Application in a Complex Job Shop in the Semiconductor Industry“ |
| 2020 | Clemens Wolf: „System-Oriented Service Delivery: Designing Pareto-Efficient Operations Solutions in Service Systems“ |
| 2020 | Shiva Faenghinezhad: „A systematic approach for strategic planning and management of operation room departments“ |
| 2020 | Katharina Glock: „Emergency rapid mapping with drones - <i>Models and solution approaches for offline and online mission planning</i> “ |

- 2019** **Alexander Kleff:** „Scheduling and Routing of Truck Drivers Considering Regulations on Drivers' Working Hours“
- 2018** **Brita Rohrbeck:** „Location Planning of Charging Stations for Electric City Buses“
- 2017** **Matthias Bender:** „Recent Mathematical Approaches to Service Territory Design“
- 2017** **Felix Brandt:** „The Air Cargo Load Planning Problem“
- 2017** **Melanie Reuter-Oppermann:** „On the Optimisation of EMS Logistics“
- 2016** **Mahdi Moghadasian:** „Integrated Lead Time and Demand Risk Pooling Strategies in Multi-Echelon Distribution Systems“
- 2016** **Alex Butsch:** „Districting Problems New Geometrically Motivated Approaches“
- 2015** **Iris Heckmann:** „Towards Supply Chain Risk Analytics: Fundamentals – Simulation – Optimization“
- 2014** **Fabian Dunke:** „Online Optimization with Lookahead“
- 2013** **Hadi Sahebishahemabadi:** „Strategic and Tactical Crude Oil Supply Chain: Mathematical Programming Models“
- 2013** **Eric Ebermann:** „Simulation und Optimierung logistischer Prozesse in der Wärmebehandlung von Stahl“
- 2011** **Hans-Peter Ziegler:** „Algorithms for Linear Stochastic Programs and their Application in Supply Chain Network Design Problems“
- 2011** **Ursula-Anna Schmidt:** „Prozessoptimierung im Krankenhausbereich – Logistische Abläufe mit Schwerpunkt Radiologie und deren Verbesserungspotenziale“
- 2010** **Ansgar Geiger:** „Strategic Power Plant Investment Planning under Fuel and Carbon Price Uncertainty“
- 2010** **Christian Heib:** „Kostenorientierte Optimierung komplexer Fertigungssysteme mithilfe von Simulationsmodellen“
- 2008** **Sebastian Velten:** „Discrete Location Problems with Flexible Objectives“
- 2008** **Shahin Gelareh:** „Hub Location Models in Public Transport Planning“
- 2006** **Jörg Kalcsics:** „Unified Approaches to Territory Design and Facility Location“
- 2004** **Julia Kallrath:** „Online Storage Systems and Transportation Problems with Applications – Optimization Models and Mathematical Solutions“

- 2003** **Patricia Domínguez-Marín:** „The Discrete Ordered Median Problem: Models and Solution Methods“
- 1999** **Ansgar Weißler:** „General Bisectors and their Application in Planar Location Theory“

Abschlussarbeiten

Betreuung von ca. 230 Diplom-, Master- und Bachelorarbeiten während der vergangenen zehn Jahre.

Projekte und Forschungsverträge

Forschungsverträge mit öffentlichen Geldgebern

- Seit 2023** **DFG-Projekt NI 521/11-1** „Daten- und zielgetriebene sequentielle Entscheidungsfindung für zeitdynamische Logistiksysteme“
- 2018 – 2021** **DFG-Projekt NI 521/9-1** „Sequentielles Entscheiden bei systeminhärenter Unsicherheit: Mathematische Optimierungsverfahren für zeitdynamische Anwendungen“
- 2015 – 2016** **DAAD-Projekt** „Embedding Risk in Supply Chain Network Design Problems“, Programm des Projektbezogenen Personenaustauschs (PPP) mit F. Saldanha-da-Gama, Lissabon
- 2012 – 2013** **DAAD-Projekt** „Developing Methods to Plan Long-term Care Services“, Programm des Projektbezogenen Personenaustauschs (PPP) mit M. Oliveira, A. Póvoa, Lissabon
- 2010 - 2012** **DFG-Projekt NI 521/6-1** „Verallgemeinerte Gebietsplanungsprobleme, neue Anwendungsbereiche und die algorithmische Umsetzung“
- 2010 - 2011** **DAAD-Projekt** „Distribution Systems Design with Role Dependent Objectives“, Programm des Projektbezogenen Personenaustauschs (PPP) mit A. M. Rodríguez Chía, Cádiz
- 2009 – 2010** **DAAD-Projekt** „Flexible Location Models Taking Reliability and Congestion into Account“, Programm des Projektbezogenen Personenaustauschs (PPP) mit O. Berman und D. Krass, Toronto
- 2007 – 2008** **Forschungsausschuss der Universität des Saarlandes** (Anschubfinanzierung): „Optimierung logistischer Arbeitsabläufe, insbesondere Analyse und Verbesserung der gegenwärtig umgesetzten Zeitpläne zum bestmöglichen Organisationsablauf am Beispiel der Kliniken für Chirurgie und Radiologie, hier Radiodiagnostik der Universitätskliniken des Saarlandes“ mit M. Schilling

- 2006 – 2008** **DFG-Projekt NI 521/4-1** „*Entwicklung von Planungsverfahren für Standortentscheidungen zur Optimierung von Distributionsnetzen in aufeinander folgenden Zeitperioden unter Verwendung von Geodaten*“ mit U. Clausen
- 2006 – 2007** **DAAD-Projekt** „*Optimization of Transports in Hospitals*“, Programm des Projektbezogenen Personenaustauschs (PPP) mit G. Laporte, Montreal
- 2004 – 2007** **DAAD-Projekt** „*Acciones Integradas Hispano-Alemanas*“, Programm des Projektbezogenen Personenaustauschs (PPP) mit A. Marín, Murcia
- 2004 – 2007** **Alfa-Project** (Akademisches Austauschprogramm zwischen der Europäischen Union und Lateinamerika): „*SistIng – Multiple Criteria Decision Making in Engineering and Economics*“
- 2002 – 2004** **ISSI-Projekt:** „*Optimierung des Patiententransports in Krankenhäusern*“
- 2001 – 2004** **BMBF-Projekt:** „*SILVER: Simulationsbasierte Systeme zur Integration logistischer und verfahrenstechnischer Entscheidungsprozesse*“ mit W. Appelt, G. Deerberg und S. Wenzel
- 2001 – 2004** **BMBF-Projekt:** „*SEV: Simulationsbasierte Evaluation und Verbesserung von Software-Entwicklungsprozessen*“ mit T. Berlage und J. Münch
- 2000 - 2003** **BMBF-Projekt:** „*KogiPlan – Kooperation, GIS und Entscheidungsunterstützung für die Standortplanung*“ mit U. Jasnoch und H. Voss

Ausgewählte Industrieprojekte

- Seit 2021** **SAP AG**
SAC Planning – Optimization Enhancements and Uncertainty Considerations mit der SAP AG, Walldorf
- Seit 2006** **Projektpartner: Uniklinik Mainz, Klinikum Frankfurt-Hoechst, Universitätsklinikum des Saarlandes, Städtisches Klinikum Karlsruhe, St. Vincentius-Kliniken gAG Karlsruhe**
Verschiedene Beratungsprojekte mit Kliniken
- Patiententransport
 - Appointment Planning
 - Klinische Pfade
 - Krankenhauslogistik
 - Op-Planung
- 2014 – 2016** **BASF Ludwigshafen**
Discrete Optimization within the Framework of Industry 4.0
- 2009 – 2011** **Dillinger Hüttenwerke**
Reihenfolgeoptimierung in der Wärmebehandlung in Zusammenarbeit mit AG der Dillinger Hüttenwerke, Dillingen/Saar

2007 – 2008	Fissler GmbH Bestimmung des optimalen Order-Penetration-Points für die Topf-Produktion im Werk Neubrücke in Zusammenarbeit mit Fissler GmbH, Idar-Oberstein
2001 – 2004	psb GmbH Planungsunterstützung bei der Realisierung eines Warenversandzentrums durch Simulation und Optimierung in Zusammenarbeit mit psb GmbH, Pirmasens
2000 – 2006	SAP AG Analyse und Optimierung von Standortentscheidungen im SupplyChain Design in Zusammenarbeit mit der SAP AG, Walldorf
2002 – 2005	geomer GmbH Neue Verfahren zur Vertriebsgebietsplanung in Zusammenarbeit mit geomer GmbH, Heidelberg
2003 – 2004	DB AG Analyse und Neuplanung von Haltepunkten für die Bahn in Zusammenarbeit mit der DB AG, Berlin
2002 – 2004	Pierau-Planung Effektiveres Kommissionieren durch mathematische Optimierungsansätze in Zusammenarbeit mit Pierau-Planung, Hamburg
2000 – 2002	ICON Industrie Consulting GmbH Mehrstufige Produktionsplanung mit hochdynamischen Stücklisten in Zusammenarbeit mit ICON Industrie Consulting GmbH, Karlsruhe
2000	Lufthansa AG Urlaubsplanung in Fluggesellschaften in Zusammenarbeit mit der Lufthansa AG, Frankfurt

Engagement für wissenschaftliche Institutionen

Fakultätsaktivitäten

2016 – 2018	Prodekan der KIT-Fakultät Wirtschaftswissenschaften, KIT Karlsruhe
2014 - 2016	Dekan der KIT-Fakultät Wirtschaftswissenschaften, KIT Karlsruhe
2012 – 2014	Prodekan der KIT-Fakultät Wirtschaftswissenschaften, KIT Karlsruhe
2004 – 2006	Vorsitzender des Wirtschaftswissenschaftlichen Prüfungssekretariates der Abteilung Wirtschaftswissenschaften, Universität des Saarlandes

2004 – 2006 Studiendekan der Rechts- und Wirtschaftswissenschaftlichen Fakultät, Universität des Saarlandes

Organisation von internationalen wissenschaftlichen Konferenzen

2021 **ISOLDE**, virtuell
Chair Program Committee, Co-Organizer

2019 **ORAHS**, Karlsruhe
Chair Program Committee, Organizer

2014 **IFORS**, Barcelona
Chair Program Committee

Wissenschaftliche Vereinigungen und Gruppen

Seit 2019 Vice President EURO and Member of the IFORS Administrative Committee

Seit 2019 Vice President IFORS and Member of the EURO Executive Committee

Seit 2017 Mitglied des externen Advisory Boards des Centro de Investigação Operacional de Fundação da Faculdade de Ciências da Universidade de Lisboa

2013 – 2014 Vorstandsvorsitzender der Gesellschaft für Operations Research e.V.

2009 – 2014 Mitglied des Vorstands der Gesellschaft für Operations Research e.V.

2007 – 2011 Sprecher des Boards der European Working Group on Locational Analysis (EWGLA)

2006 – 2009 Vorsitzender der Arbeitsgruppe Health Care Management der Gesellschaft für Operations Research e.V.

2007 – 2008 Mitglied des Beirats der Gesellschaft für Operations Research e.V.

Wissenschaftliche Zeitschriften

Seit 2016 Editor-in-Chief von "Operations Research for Health Care"

Seit 2008 Mitglied des Editorial Board von "Health Care Management Science"

2016 – 2018 Consulting Editor von "Computers & Operations Research"

2006 - 2015 Editor-in-Chief von "Computers & Operations Research"

2002 – 2009 Associate Editor von "Operations Research Letters"

Weitere Aktivitäten

- Seit 2014** Vorsitzender des Aufsichtsrats der SimPlan AG
- Seit 2011** Mitglied der Geschäftsführung des International Departments des
Karlsruher Institut für Technologie GmbH
- Seit 2007** Mitglied der VDI-Fachausschüsse "Simulation und Optimierung"
und "Modellbildung"
- 2011 – 2014** Mitglied im Aufsichtsrat der SimPlan AG

Veröffentlichungen (h-index: 59)

Bücher

1. Decision Optimization with IBM ILOG CPLEX Optimization Studio: A Hands-On Introduction to Modeling with the Optimization Programming Language (OPL); S. Nickel, C. Steinhardt, H. Schlenker, W. Burkart (Hrsg.), Springer Nature, 2022.
2. Angewandte Optimierung mit IBM ILOG CPLEX Optimization Studio. Modellierung von Planungs- und Entscheidungsproblemen des Operations Research mit OPL; S. Nickel, C. Steinhardt, H. Schlenker, W. Burkart, M. Reuter-Oppermann (Hrsg.), 2. Auflage, 293 Seiten, Springer Nature, 2021.
3. Location Science; G. Laporte, S. Nickel, F. Saladanha-da-Gama (Hrsg.), 2. Auflage, 767 Seiten, Springer, 2019.
4. Fundamentals of Service Systems; J. Cardoso, H. Fromm, S. Nickel, G. Satzger, R. Studer, Ch. Weinhardt (Hrsg.), 362 Seiten, Springer, 2015.
5. Operations Research; S. Nickel, O. Stein und K.-H. Waldmann, 2. korrigierte und aktualisierte Auflage, 385 Seiten, Springer Gabler, 2014.
6. Operations Research Proceedings 2007, Selected Papers of the Annual International Conference of the German Operations Research Society (GOR); J. Kalcsics und S. Nickel (Hrsg.), Springer, 2008.
7. Location Theory: A Unified Approach; S. Nickel und J. Puerto, 463 Seiten, Springer, 2005.
8. Discrete and Network Location Theory; S. Nickel, Vorlesungsskript, Fachbereich Mathematik, Universität Kaiserslautern, 1999.
9. Convex Analysis; S. Nickel, Vorlesungsskript, Fachbereich Mathematik, Universität Kaiserslautern, 1998.
10. Systems Thinking and its Applications; H. W. Hamacher und S. Nickel (Hrsg.), in *Modellierung im Interdisziplinären Studienprogramm*, 209 Seiten, Shaker Verlag, 1997.

11. Recent Advances in Locational Analysis, Proceedings of the 8th meeting of the Euro Working Group on Locational Analysis (EWGLA8), H. W. Hamacher, K. Klamroth und S. Nickel (Hrsg.) in *Studies of Locational Analysis* 10, 190 Seiten, 1996.
12. Discretization of Planar Location Problems; Dissertation, Universität Kaiserslautern, 108 Seiten, Shaker Verlag, 1995.
13. Emergency, Industrial and Public Transportation Planning Using Linear and Integer Programming; M. Ehrgott, H. W. Hamacher, M. C. Müller und S. Nickel, Universität Kaiserslautern, 101 Seiten, 1994.

Artikel in Fachzeitschriften und Tagungsbänden, Beiträge in Monografien

1. Bathe, J., Renner, H.-J., Watzinger, S., Olave-Rojas, D., Hannappel, L., Wnent, J., Nickel, S., Gräser, J.-T., "Das SCATTER-Projekt: Computerbasierte Simulation zur Unterstützung bei der strategischen Verlegung von Intensivpatienten", *Bundesgesundheitsblatt – Gesundheitsforschung – Gesundheitsschutz*, Vol. 67, pp. 215-224 (2024).
2. Watzinger, S., Nießner, C, Schutz, C., Groß, D., Schmitz, D., Stock, J.-P., Fabrizio, M., Frey, P., Böhm, R., Sebold, S., Ade, T., Nickel, S., "Patientenorientierte Planungskriterien für die Logistik in der Notfallrettung", *Notfall + Rettungsmagazin*, pp. 1-9 (2024).
3. Bakker, H., Nickel, S., "The Value of the Multi-period Solution revisited: When to model time in capacitated location problems", *Computers & Operations Research*, 161, art. No. 106428 (2024).
4. Dunke, F., Nickel S., "Exact reoptimisation under gradual look-ahead for operational control in production and logistics", *International Journal of Systems Science: Operations & Logistics*, 10 (1), art. No. 2141590 (2023).
5. Bakker, H., Diehlmann, F., Wiens, M., Nickel, S., Schultmann, F., "School or parking lot? Selecting locations for points of distribution in urban disasters", *Socio-Economic Planning Sciences*, 89, art. No. 101670 (2023).
6. Wnent, J., Bandlow, S., Renner, H.-J., Gräsner, J., Hannappel, L., Watzinger, S., Nickel, S., Dax, F., "Rettungsdienststrukturen neu denken – Logistik in der präklinischen Notfallversorgung", *Notfall + Rettungsmedizin*, pp. 1-6 (2023).
7. Dunke, F., Nickel, S., "Metamodel-based dynamic algorithm configuration using artificial neural networks", *International Journal of General Systems*, pp. 1-31 (2023).
8. Simonis, M., Nickel, S., "Generalized data model for real-world capacitated lot-sizing problems with linked lot sizes and backorders", *Data in brief*, 49, art No. 109440 (2023).
9. Grothe, O., Nickel, S., Rebennack, S., Stein, O., "Operations Research Proceedings 2022: Selected Papers of the Annual International Conference of the German Operations Research Society (GOR), Karlsruhe, Germany, September 6-9, 2022", *Lecture Notes in Operations Research* (2023).

10. Simonis, M., Nickel, S., "A simulation-optimization approach for a cyclic production scheme in a tablets packaging process", *Computers & Industrial Engineering*, 181, art No. 109304 (2023).
11. Bakker, H., Bindewald, V., Dunke, F., Nickel, S., "Logistics for diagnostic testing: An adaptive decision-support framework", *European Journal of Operational Research*, 311 (3), pp. 1120-1133 (2023).
12. Heckmann, I., Nickel, S., Saldanha-da-Gama, F., "Facility Location and Supply Chain Risk Analytics", *Uncertainty in Facility Location Problems*, pp. 155-181 (2023).
13. Bindewald, V., Dunke, F., Nickel, S., "Comparison of different approaches to multistage lot sizing with uncertain demand", *International Transactions in Operational Research*, 30 (6), pp. 3771-3800 (2023).
14. Dunke, F., Nickel, S., "A matheuristic for customized multi-level multi-criteria university timetabling", *Annals of Operations Research*, 328, pp. 1313-1348 (2023).
15. Faeghi, S., Lennerts, K., Nickel, S., "Strategic planning of operating room session allocation using stability analysis", *Health Systems*, 12 (2), pp. 167-180 (2023).
16. Janschekowitz, M., Taherkhani, G., Alumur, S., Nickel, S., "An alternative approach to address uncertainty in hub location", *OR Spectrum*, 45, pp. 359-393 (2023).
17. Faeghi, S., Lennerts, K., Nickel, S., "A system dynamics model application to operating room planning and management", *Journal of Simulation*, 17 (1), pp. 58-75 (2023).
18. Dunke, F., Nickel, S., "A multi-method approach to scheduling and efficiency analysis in dual-resource constrained job shops with processing time uncertainty", *Computers and Industrial Engineering*, 168, art. No. 108067 (2022).
19. Dunke, F., Nickel, S., "Correction to: Exact distributional analysis of online algorithms with lookahead", *4OR*, 20 (1), pp. 167 (2022).
20. Buhlinger-Göppfarth, N., Zander A., Heckmann, I., Holzmann, T., Lauck, K., Stengel, S., Nickel, S., Peters-Klimm, F., "Time Spent on the Vaccination Process and Organization of the COVID-19 Vaccination in Family Practices", *Zeitschrift für Allgemeinmedizin*, 98 (3), pp. 100-105 (2022).
21. Korzhenevich, G., Zander, A., Nickel, S., Schuster, M., "OP-Planung – der Einsatz quantitativer Methoden zur Entscheidungsunterstützung", *Op-Management up2date*, 1 (04), pp. 327-339 (2021).
22. Dunke, F., Nickel, S., "Simulation-based multi-criteria decision making: an interactive method with a case study on infectious disease epidemics", *Annals of Operations Research*, pp. 1-30 (2021).
23. Dunke, F., Nickel, S., "Online optimization with gradual look-ahead", *Operational research*, 21, pp. 2489–2523 (2021).

24. Zander, A., Nickel, S., Vanberkel, P.; "Managing the intake of new patients into a physician panel over time", *European Journal of Operational Research*, 294 (1), pp. 391-403 (2021).
25. Dunke, F., Nickel, S., "Exact distributional analysis of online algorithms with lookahead", *4OR*, 19 (2), pp. 199-233 (2021).
26. Olave-Rojas, D., Nickel, S., "Modeling a pre-hospital emergency medical service using hybrid simulation and a machine learning approach", *Simulation Modelling Practice and Theory*, 109, art. No. 102302 (2021).
27. Razm, S., Dolgui, A., Hammami, R., Brahimi, N., Nickel, S., Sahebi, H., "A two-phase sequential approach to design bioenergy supply chains under uncertainty and social concerns", *Computers and Chemical Engineering*, 145, art. No. 107131 (2021).
28. Cordeau, J.F., Klibi, W., Nickel, S., "Logistics Network Design", in Crainic, T.G., Gendreau, M., Gendron, B. (Hrsg.), "Network Design with Applications to Transportation and Logistics", Springer, pp. 599-625 (2021).
29. Dunke, F., Nickel, S., "A data-driven methodology for the automated configuration of online algorithms", *Decision Support Systems*, 137, art. No. 113343 (2020).
30. Diglio, A., Nickel, S., Saldanha-da-Gama, F., "Towards a stochastic programming modeling framework for districting", *Annals of Operations Research*, 292 (1), pp. 249-285 (2020).
31. Dunke, F., Nickel, S., "Improving company-wide logistics through collaborative track and trace IT services", *International Journal of Logistics Systems and Management*, 35 (3), pp. 329-353 (2020).
32. Dunke, F., Nickel, S., "Neural networks for the metamodeling of simulation models with online decision making", *Simulation Modelling Practice and Theory*, 99, art. No. 102016 (2020).
33. Bakker, H., Dunke, F., Nickel, S., "A structuring review on multi-stage optimization under uncertainty: Aligning concepts form theory and practice", *Omega*, (United Kingdom), 96, art. No. 102080 (2020).
34. Reuter-Oppermann, M., Nickel, S., Steinhäuser, J., "Operations research meets need related planning: Approaches for locating general practitioners' practices", *PLoS ONE*, 14 (1), art. No. e0208003 (2019).
35. Yanik, S., Kalcsics, J., Nickel, S., Bozkaya, B., "A multi-period multi-criteria districting problem applied to primary care scheme with gradual assignment", *International Transactions in Operational Research*, 26 (5), pp. 1676-1697 (2019).
36. Zhang, L., Kill, C., Jerrentrup, A., Baer, F., Amberg, B., Nickel, S., "Improving quality of care in a multidisciplinary emergency department by the use of simulation optimization: Preliminary results", *Proceedings – Winter Simulation Conference 2018*, art. No. 8632437, pp. 2518-2529 (2019).
37. Razm, S., Nickel, S., Saidi-mehrabad, M., Sahebi, H., "A global bioenergy supply network redesign through integrating transfer pricing under uncertain condition", *Journal of Cleaner Production*, 208, pp. 1081-1095, (2019).

38. Razm, S., Nickel, S., Sahebi, H., "A multi-objective mathematical model to redesign of global sustainable bioenergy supply network", *Computers and Chemical Engineering*, 128, pp. 1-20 (2019).
39. Brandt, F., Nickel, S., "The air cargo load planning problem - a consolidated problem definition and literature review on related problems", *European Journal of Operational Research*, 275 (2), pp. 399-410 (2019).
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