Michael Freitag

List of Publications by Year in Descending Order

147 papers	1,237 citations	18 h-index	30 g-index
163 ext. papers	1,564 ext. citations	1.9 avg, IF	5.38 L-index

#	Paper	IF	Citations
147	Planung von Assistenzsystemen f□ die industrielle Montage. *ZWF Zeitschrift Fuer Wirtschaftlichen Fabrikbetrieb*, **2022**, 117, 157-163	0.5	
146	Challenges and Approaches of Non-pharmaceutical Interventions for Airport Operations During Pandemic Situations. *Lecture Notes in Logistics*, **2022**, 52-64	0.5	
145	An Inter-organizational Digital Platform for Efficient Container Transportation. *Lecture Notes in Logistics*, **2022**, 290-300	0.5	1
144	Towards individualized shoes: Deep learning-based fault detection for 3D printed footwear. *Procedia CIRP*, **2022**, 107, 196-201	1.8	
143	Human-Centered Design of Cognitive Assistance Systems for Industrial Work. *Procedia CIRP*, **2022**, 107, 233-238	1.8	
142	Autonomous, low-cost sensor module for fill level measurement for a self-learning electronic Kanban system. *IFAC-PapersOnLine*, **2021**, 54, 623-628	0.7	
141	Conceptual Model for Integrated Production and Maintenance Planning with Automated Prognostic Method Selection. *IFAC-PapersOnLine*, **2021**, 54, 635-640	0.7	0
140	Prognostic Methods for Predictive Maintenance: A generalized Topology. *IFAC-PapersOnLine*, **2021**, 54, 629-634	0.7	
139	Automobile Logistics 4.0: Advances Through Digitalization **2021**, 197-226		
138	Autonomous Control of Logistic Processes: A Retrospective **2021**, 3-34		
137	Modeling Individualized Sustainable Last Mile Logistics **2021**, 277-293		0
136	Convolutional neural network with dual inputs for time series ice prediction on rotor blades of wind turbines. *Procedia CIRP*, **2021**, 104, 446-451	1.8	0
135	Augmented Reality zur Steigerung der Arbeitssicherheit von Mobilkranen. *ZWF Zeitschrift Fuer Wirtschaftlichen Fabrikbetrieb*, **2021**, 116, 716-721	0.5	
134	A Crew Scheduling Model to Incrementally Optimize Workforce Assignments for Offshore Wind Farm Constructions. *Energies*, **2021**, 14, 6963	3.1	
133	Text Mining for Supply Chain Risk Management in the Apparel Industry. *Applied Sciences (Switzerland)*, **2021**, 11, 2323	2.6	7
132	Integration eines omnidirektionalen FTF in eine Produktionsprozesssteuerung. *ZWF Zeitschrift Fuer Wirtschaftlichen Fabrikbetrieb*, **2021**, 116, 161-165	0.5	
131	Evaluation of the Impact of Weather-Related Limitations on the Installation of Offshore Wind Turbine Towers. *Energies*, **2021**, 14, 3778	3.1	

130	Bestimmung des Automatisierungsgrades in der Montage. *ZWF Zeitschrift Fuer Wirtschaftlichen Fabrikbetrieb*, **2021**, 116, 413-418	0.5	
129	Simulated-based methodology for the interface configuration of cyber-physical production systems. *International Journal of Production Research*, **2021**, 59, 5388-5403	7.8	5
128	Forecasting of customer demands for production planning by local k-nearest neighbor models. *International Journal of Production Economics*, **2021**, 231, 107837	9.3	21
127	Nachhaltige und individualisierte Zustellung von Lebensmitteln **2021**, 679-694		
126	What is the Right Home Delivery Option for Your Online Shopping?. *Lecture Notes in Logistics*, **2021**, 137-150	0.5	
125	Quality control of apples by means of convolutional neural networks - Comparison of bruise detection by color images and near-infrared images. *Procedia CIRP*, **2021**, 99, 290-294	1.8	0
124	Ermittlung und Bewertung von Einsatzpotenzialen der Mensch-Roboter-Kollaboration. *ZWF Zeitschrift Fuer Wirtschaftlichen Fabrikbetrieb*, **2021**, 116, 8-15	0.5	0
123	A Systematic Review of User Acceptance in Industrial Augmented Reality. *Frontiers in Education*, **2021**, 6,	2.1	2
122	Recognition of car parts in automotive supply chains by combining synthetically generated training data with classical and deep learning based image processing. *Procedia CIRP*, **2020**, 93, 377-382	1.8	4
121	Ice Detection on Rotor Blades of Wind Turbines using RGB Images and Convolutional Neural Networks. *Procedia CIRP*, **2020**, 93, 1292-1297	1.8	10
120	The impact of information sharing on installation processes of offshore wind farms - process modelling and simulation-based analysis. *International Journal of Shipping and Transport Logistics*, **2020**, 12, 117	1	1
119	A U-Net Based Approach for Automating Tribological Experiments. *Sensors*, **2020**, 20,	3.8	1
118	Manufacturing networks in the era of digital production and operations: A socio-cyber-physical perspective. *Annual Reviews in Control*, **2020**, 49, 288-294	10.3	18
117	Using a Digital Twin for Production Planning and Control in Industry 4.0. *Profiles in Operations Research*, **2020**, 39-60	1	10
116	Orientation detection of fruits by means of convolutional neural networks and laser line projection for the automation of fruit packing systems. *Procedia CIRP*, **2020**, 88, 533-538	1.8	4
115	Travel Time Prediction in a Multimodal Freight Transport Relation Using Machine Learning Algorithms. *Logistics*, **2020**, 4, 1	3.5	19
114	Optimization of Supplier Development under Market Dynamics. *Mathematical Problems in Engineering*, **2020**, 2020, 1-18	1.1	4
113	A Numerical Study on the Effects of Trust in Supplier Development. *Processes*, **2020**, 8, 300	2.9	

112	Einsatz mobiler Computersysteme im Rahmen von Industrie 4.0 zur Bewältigung des demografischen Wandels. *Springer Reference Technik*, **2020**, 1-31	0.1	0
111	Monitoring of the vacuum infusion process by integrated RFID transponder. *Procedia Manufacturing*, **2020**, 52, 20-25	1.5	1
110	Development of an Autonomous Light Control Algorithm with a Simulation Model of a Container Terminal. *Procedia Manufacturing*, **2020**, 52, 221-227	1.5	1
109	Deep Learning-based Object Recognition for Counting Car Components to Support Handling and Packing Processes in Automotive Supply Chains. *IFAC-PapersOnLine*, **2020**, 53, 10645-10650	0.7	2
108	Simulation-Based Optimization for the Integrated Control of Production and Logistics: A Performance Comparison. *IFAC-PapersOnLine*, **2020**, 53, 10639-10644	0.7	0
107	Quality Control and Characterization. *Lecture Notes in Production Engineering*, **2020**, 253-310	0	
106	Process Design. *Lecture Notes in Production Engineering*, **2020**, 95-132	0	
105	Machine Learning in Production Scheduling: An Overview of the Academic Literature. *Lecture Notes in Logistics*, **2020**, 409-419	0.5	2
104	Mobile AR-Based Assistance Systems for Order Picking Methodical Decision Support in the Early Phases of the Product Life Cycle. *Communications in Computer and Information Science*, **2020**, 74-87	0.3	2
103	Revisiting order assignment problems in a real-case vehicle compound scenario **2020**,		1
102	Applicability of Algorithm Evaluation Metrics for Predictive Maintenance in Production Systems **2020**,		1
101	Human Factors-basierte Arbeitsgestaltung in Cyber-Physischen Produktionssystemen. *ZWF Zeitschrift Fuer Wirtschaftlichen Fabrikbetrieb*, **2020**, 115, 434-437	0.5	
100	On the Influence of Structural Complexity on Autonomously Controlled Automobile Terminal Processes. *Lecture Notes in Logistics*, **2020**, 42-51	0.5	0
99	Influence of Supply Chain Management & Logistics in the Wake of China Pakistan Economic Corridor (CPEC) on Domestic Industry in Pakistan. *Lecture Notes in Logistics*, **2020**, 175-185	0.5	
98	Individual Predictive Maintenance Approach for Diesel Engines in Rail Vehicles. *Lecture Notes in Logistics*, **2020**, 236-244	0.5	3
97	A Concept for a Consumer-Centered Sustainable Last Mile Logistics. *Lecture Notes in Logistics*, **2020** , 196-203	0.5	4
96	Using RFID to Monitor the Curing of Aramid Fiber Reinforced Polymers. *Lecture Notes in Logistics*, **2020**, 441-450	0.5	1
95	Improving Human-Machine Interaction with a Digital Twin. *Lecture Notes in Logistics*, **2020**, 527-540	0.5	4

94	Requirements for an Incentive-Based Assistance System for Manual Assembly. *Lecture Notes in Logistics*, **2020**, 541-553	0.5	5
93	Evaluation of Human-Computer-Interaction Design in Production and Logistics by Using Experimental Investigations. *Lecture Notes in Logistics*, **2020**, 554-566	0.5	2
92	Functionalities and Implementation of Future Informational Assistance Systems for Manual Assembly. *Communications in Computer and Information Science*, **2020**, 88-109	0.3	7
91	Investigation of icing causes on wind turbine rotor blades using machine learning models, minimalistic input data and a full-factorial design. *Procedia Manufacturing*, **2020**, 52, 168-173	1.5	3
90	Control architecture for digital twin-based human-machine interaction in a novel container unloading system. *Procedia Manufacturing*, **2020**, 52, 215-220	1.5	3
89	User-Centered Evaluation of an Augmented Reality-based Assistance System for Maintenance. *Procedia CIRP*, **2020**, 93, 921-926	1.8	6
88	Frequency response analysis of inventory variation in production networks with information sharing. *Procedia CIRP*, **2020**, 93, 765-770	1.8	1
87	FPGA-Based Optical Surface Inspection of Wind Turbine Rotor Blades Using Quantized Neural Networks. *Electronics (Switzerland)*, **2020**, 9, 1824	2.6	1
86	A multi-product job shop scenario utilising Model Predictive Control. *Expert Systems With Applications*, **2020**, 162, 113734	7.8	1
85	Investigation of using RFID for cure monitoring of glass fiber-reinforced plastics. *Production Engineering*, **2020**, 14, 499-507	1.9	1
84	Simulation of contrary maintenance strategies for offshore wind turbines. *Journal of Simulation*, **2020**, 14, 76-82	1.9	2
83	Design and simulation of a control algorithm for peak-load shaving using vehicle to grid technology. *SN Applied Sciences*, **2019**, 1, 1	1.8	9
82	Control strategies for small-scaled conveyor modules enabling highly flexible material flow systems. *Procedia CIRP*, **2019**, 79, 433-438	1.8	3
81	Anomaly detection with convolutional neural networks for industrial surface inspection. *Procedia CIRP*, **2019**, 79, 484-489	1.8	51
80	Real-time environmental analysis for industrial vehicles based on synthetic sensor data and deep learning. *Procedia CIRP*, **2019**, 81, 252-257	1.8	2
79	Machine learning-based icing prediction on wind turbines. *Procedia CIRP*, **2019**, 81, 423-428	1.8	19
78	Automatic Optical Surface Inspection of Wind Turbine Rotor Blades using Convolutional Neural Networks. *Procedia CIRP*, **2019**, 81, 1166-1170	1.8	8
77	Deep Learning-Based Pose Estimation of Apples for Inspection in Logistic Centers Using Single-Perspective Imaging. *Processes*, **2019**, 7, 424	2.9	5

76	Evaluation of Loading Bay Restrictions for the Installation of Offshore Wind Farms Using a Combination of Mixed-Integer Linear Programming and Model Predictive Control. *Applied Sciences (Switzerland)*, **2019**, 9, 5030	2.6	3
75	Simulation and Optimization of Operations for Offshore Installations Planning Using a Model Predictive Control Scheme **2019**,		1
74	Indoor Positioning in Car Parks by using Wi-Fi Round-Trip-Time to support Finished Vehicle Logistics on Port Terminals. *IFAC-PapersOnLine*, **2019**, 52, 857-862	0.7	8
73	Simulation-based Analysis of the Interaction of a Physical and a Digital Twin in a Cyber-Physical Production System. *IFAC-PapersOnLine*, **2019**, 52, 1331-1336	0.7	8
72	A Review on the Planning Problem for the Installation of Offshore Wind Farms. *IFAC-PapersOnLine*, **2019**, 52, 1337-1342	0.7	6
71	An Approach to Designing Supply Chain Networks Considering the Occurrence of Disruptive Events. *IFAC-PapersOnLine*, **2019**, 52, 1761-1766	0.7	1
70	Determination of the Optimal State of Dough Fermentation in Bread Production by Using Optical Sensors and Deep Learning. *Applied Sciences (Switzerland)*, **2019**, 9, 4266	2.6	5
69	Wireless Pick-by-Light: Usability of LPWAN to Achieve a Flexible Warehouse Logistics Infrastructure. *Lecture Notes in Logistics*, **2018**, 273-283	0.5	4
68	Effects of Sensor-Based Quality Data in Automotive Supply Chains A Simulation Study. *Lecture Notes in Logistics*, **2018**, 289-297	0.5	3
67	Hybrid approach for the integrated scheduling of production and transport processes along supply chains. *International Journal of Production Research*, **2018**, 56, 2019-2035	7.8	39
66	Data-driven production control for complex and dynamic manufacturing systems. *CIRP Annals - Manufacturing Technology*, **2018**, 67, 515-518	4.9	60
65	Requirements for an Augmented Reality-Based Assistance System. *Lecture Notes in Logistics*, **2018**, 335-340	0.5	1
64	Decommissioning of Offshore Wind Farms. *Lecture Notes in Logistics*, **2018**, 216-222	0.5	1
63	Application of Online Learning for the Dynamic Configuration of Kanban Systems **2018**,		2
62	Using Sensor-Based Quality Data in Automotive Supply Chains. *Machines*, **2018**, 6, 53	2.9	11
61	Solving the Job-Shop Scheduling Problem in the Industry 4.0 Era. *Technologies*, **2018**, 6, 107	2.4	48
60	General Requirements for Industrial Augmented Reality Applications. *Procedia CIRP*, **2018**, 72, 1130-1135	1.8	51
59	Identification of Sensor Requirements for a Quality Data-based Risk Management in Multimodal Supply Chains. *Procedia CIRP*, **2018**, 72, 563-568	1.8	2

58	Towards a simulation-based optimization approach to integrate supply chain planning and control. *Procedia CIRP*, **2018**, 72, 520-525	1.8	11
57	Curing Transponder Integrating RFID transponder into glass fiber-reinforced composites to monitor the curing of the component. *Procedia Manufacturing*, **2018**, 24, 94-99	1.5	3
56	Use of RFID tags for monitoring resin flow and investigation of their influence on the mechanical properties of the composite. *Procedia Manufacturing*, **2018**, 24, 305-310	1.5	4
55	Sharing Sensor Based Quality Data in Automotive Supply Chain Processes. *IFAC-PapersOnLine*, **2018**, 51, 770-775	0.7	5
54	Enhancing Expert Knowledge Based Cause-Effect Networks Using Continuous Production Data. *Procedia Manufacturing*, **2018**, 24, 128-134	1.5	2
53	Potential of a Multi-Agent System Approach for Production Control in Smart Factories. *IFAC-PapersOnLine*, **2018**, 51, 1459-1464	0.7	20
52	Real-time Predictive Maintenance Based on Complex Event Processing **2018**, 291-296		1
51	Local characterisation of variances for the planning and configuration of process chains in micro manufacturing. *Journal of Manufacturing Systems*, **2017**, 43, 79-87	9.1	7
50	Online-scheduling using past and real-time data. An assessment by discrete event simulation using exponential smoothing. *CIRP Journal of Manufacturing Science and Technology*, **2017**, 19, 158-163	3.4	9
49	Simulation Based Investigation of the Impact of Information Sharing on the Offshore Wind Farm Installation Process. *Journal of Renewable Energy*, **2017**, 2017, 1-11	1.4	12
48	Resource Sharing in the Logistics of the Offshore Wind Farm Installation Process based on a Simulation Study. *International Journal of E-Navigation and Maritime Economy*, **2017**, 7, 42-54		11
47	Text-Mining and Gamification for the Qualification of Service Technicians in the Maintenance Industry of Offshore Wind Energy. *International Journal of E-Navigation and Maritime Economy*, **2017**, 6, 44-52		3
46	A new method for autonomous control of complex job shops Integrating order release, sequencing and capacity control to meet due dates. *Journal of Manufacturing Systems*, **2017**, 42, 11-28	9.1	47
45	Towards a standardised information exchange within finished vehicle logistics based on RFID and EPCIS. *International Journal of Production Research*, **2017**, 55, 4136-4152	7.8	16
44	Dynamics in Logistics. *Lecture Notes in Logistics*, **2017**,	0.5	3
43	Simulation of maintenance activities for micro-manufacturing systems by use of predictive quality control charts **2017**,		1
42	Evaluating the Robustness of Production Schedules using Discrete-Event Simulation. *IFAC-PapersOnLine*, **2017**, 50, 7953-7958	0.7	10
41	Towards adaptive simulation-based optimization to select individual dispatching rules for production control **2017**,		11

40	Adaptive Produktionsplanung und -steuerung. *ZWF Zeitschrift Fuer Wirtschaftlichen Fabrikbetrieb*, **2017**, 112, 126-128	0.5	5
39	Planning of Maintenance Resources for the Service of Offshore Wind Turbines by Means of Simulation. *Lecture Notes in Logistics*, **2017**, 303-312	0.5	2
38	Toward a Unified Logistics Modeling Language: Constraints and Objectives. *Lecture Notes in Logistics*, **2017**, 425-432	0.5	
37	Resource and Information Sharing for the Installation Process of the Offshore Wind Energy. *IFIP Advances in Information and Communication Technology*, **2017**, 268-275	0.5	0
36	Evaluation of Strategies for the Coupling of Central Planning and Autonomous Control in Dynamic Job Shop Environments. *Advanced Materials Research*, **2016**, 1140, 457-464	0.5	1
35	Meta-learning with neural networks and landmarking for forecasting model selection an empirical evaluation of different feature sets applied to industry data **2016**,		13
34	The Benefit of Integrating Production and Transport Scheduling. *Procedia CIRP*, **2016**, 41, 585-590	1.8	10
33	Evaluation approach for the identification of promising methods to couple central planning and autonomous control. *International Journal of Computer Integrated Manufacturing*, **2016**, 29, 438-461	4.3	8
32	Robotik in der Logistik **2016**,		8
31	Aktuelle Entwicklung der Robotik und ihre Implikationen f□den Menschen **2016**, 9-20		3
30	Managing the Life Cycle of IT-Based Inter-firm Resources in Production and Logistics Networks. *Lecture Notes in Logistics*, **2016**, 59-68	0.5	
29	Instandhaltungslogistik f□Offshore-Windenergie. *ZWF Zeitschrift Fuer Wirtschaftlichen Fabrikbetrieb*, **2016**, 111, 793-797	0.5	
28	Potential of data-driven simulation-based optimization for adaptive scheduling and control of dynamic manufacturing systems **2016**,		20
27	A Data-Driven Simulation-Based Optimisation Approach for Adaptive Scheduling and Control of Dynamic Manufacturing Systems. *Advanced Materials Research*, **2016**, 1140, 449-456	0.5	14
26	A Heuristic Optimisation Approach for the Scheduling of Integrated Manufacturing and Distribution Systems. *Procedia CIRP*, **2016**, 57, 357-361	1.8	4
25	Real-time Fault Detection for Advanced Maintenance of Sustainable Technical Systems. *Procedia CIRP*, **2016**, 41, 295-300	1.8	4
24	Emergence of Non-predictable Dynamics Caused by Shared Resources in Production Networks. *Procedia CIRP*, **2016**, 41, 520-525	1.8	2
23	Automatic design of scheduling rules for complex manufacturing systems by multi-objective simulation-based optimization. *CIRP Annals - Manufacturing Technology*, **2016**, 65, 433-436	4.9	43

22	Dynamics of resource sharing in production networks. *CIRP Annals - Manufacturing Technology*, **2015**, 64, 435-438	4.9	29
21	Evaluation System for Autonomous Control Methods in Coupled Planning and Control Systems. *Procedia CIRP*, **2015**, 33, 121-126	1.8	6
20	A Concept for the Dynamic Adjustment of Maintenance Intervals by Analysing Heterogeneous Data. *Applied Mechanics and Materials*, **2015**, 794, 507-515	0.3	3
19	Modeling, Planning, and Control of Complex Logistic Processes. *Mathematical Problems in Engineering*, **2015**, 2015, 1-2	1.1	2
18	Strategies for the Coupling of Autonomous Control and Central Planning: Evaluation of Strategies Using Logistic Objectives Achievement and Planning Adherence **2015**,		3
17	Coupling order release methods with autonomous control methods an assessment of potentials by literature review and discrete event simulation. *International Journal of Production Management and Engineering*, **2015**, 3, 43	0.4	7
16	Qualifizierung von Fachkr ften und Entscheidern. *ZWF Zeitschrift Fuer Wirtschaftlichen Fabrikbetrieb*, **2015**, 110, 583-586	0.5	1
15	Oktopus-Greifer. *ZWF Zeitschrift Fuer Wirtschaftlichen Fabrikbetrieb*, **2015**, 110, 714-717	0.5	
14	Robust Methods for the Prediction of Customer Demands based on Nonlinear Dynamical Systems. *Procedia CIRP*, **2014**, 19, 93-98	1.8	4
13	Large-scale simulation-based optimization of semiconductor dispatching rules **2014**,		15
12	Model-driven Logistics Engineering Challenges of Model and Object Transformation. *Procedia Technology*, **2014**, 15, 303-312		6
11	Bio-inspired and pheromone-based shop-floor control. *International Journal of Computer Integrated Manufacturing*, **2008**, 21, 201-205	4.3	27
10	Dynamik logistischer Systeme **2008**, 109-138		14
9	Autonomous Processes in Assembly Systems. *CIRP Annals - Manufacturing Technology*, **2007**, 56, 712-729	4.9	103
8	Mathematical Models of Autonomous Logistic Processes **2007**, 121-138		3
7	Phase-synchronisation in continuous flow models of production networks. *Physica A: Statistical Mechanics and Its Applications*, **2006**, 363, 32-38	3.3	13
6	Autonomous control of production networks using a pheromone approach. *Physica A: Statistical Mechanics and Its Applications*, **2006**, 363, 104-114	3.3	61
5	Some Remarks on the Stability of Production Networks. *Operations Research Proceedings: Papers of the Annual Meeting = Vortr ge Der Jahrestagung / DGOR*, **2006**, 91-96	0.1	4

4	Modelling Dynamics of Autonomous Logistic Processes: Discrete-event versus Continuous Approaches. *CIRP Annals - Manufacturing Technology*, **2005**, 54, 413-416	4.9	55
3	Modelling and Control of Production Systems based on Nonlinear Dynamics Theory. *CIRP Annals - Manufacturing Technology*, **2002**, 51, 375-378	4.9	31
2	Chaos detection and control in production systems **1999**, 416-423		
1	Review of Digital Twin-based Interaction in Smart Manufacturing: Enabling Cyber-Physical Systems for Human-Machine Interaction. *International Journal of Computer Integrated Manufacturing*,1-18	4.3	4