

# Birgit Vogel-Heuser

## List of Publications by Year in descending order

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434  
papers

5,735  
citations

201674

27  
h-index

155660

55  
g-index

447  
all docs

447  
docs citations

447  
times ranked

2301  
citing authors

#	ARTICLE	IF	CITATIONS
1	Toward a Graphical Modeling Tool for Response-Time Requirements Based on Soft and Hard Real-Time Capabilities in Industrial Cyber-Physical Systems. IEEE Journal of Emerging and Selected Topics in Industrial Electronics, 2022, 3, 13-22.	3.9	7
2	Different complex word problems require different combinations of cognitive skills. Educational Studies in Mathematics, 2022, 109, 89-114.	2.8	5
3	MICOSE4aPS: Industrially Applicable Maturity Metric to Improve Systematic Reuse of Control Software. ACM Transactions on Software Engineering and Methodology, 2022, 31, 1-24.	6.0	4
4	BPMN++ to support managing organisational, multiteam and systems engineering aspects in cyber physical production systems design and operation. Design Science, 2022, 8, .	2.1	1
5	Boosting Extra-Functional Code Reusability in Cyber-Physical Production Systems: The Error Handling Case Study. IEEE Transactions on Emerging Topics in Computing, 2022, 10, 60-73.	4.6	5
6	A model-driven engineering design process for the development of control software for Intralogistics Systems. Automatisierungstechnik, 2022, 70, 164-180.	0.8	3
7	Towards automatic generation of functionality semantics to improve PLC software modularization. Automatisierungstechnik, 2022, 70, 181-191.	0.8	5
8	Automation software architectures in automated production systems: an industrial case study in the packaging machine industry. Production Engineering, 2022, 16, 847-856.	2.3	3
9	A CPPS-architecture and workflow for bringing agent-based technologies as a form of artificial intelligence into practice. Automatisierungstechnik, 2022, 70, 580-598.	0.8	3
10	The INCLUSIVE System: A General Framework for Adaptive Industrial Automation. IEEE Transactions on Automation Science and Engineering, 2021, 18, 1969-1982.	5.2	13
11	Evaluating Docker for Lightweight Virtualization of Distributed and Time-Sensitive Applications in Industrial Automation. IEEE Transactions on Industrial Informatics, 2021, 17, 3566-3576.	11.3	38
12	Interdisciplinary effects of technical debt in companies with mechatronic products – A qualitative study. Journal of Systems and Software, 2021, 171, 110809.	4.5	14
13	A General Methodology for Adapting Industrial HMIs to Human Operators. IEEE Transactions on Automation Science and Engineering, 2021, 18, 164-175.	5.2	14
14	A Host Intrusion Detection System architecture for embedded industrial devices. Journal of the Franklin Institute, 2021, 358, 210-236.	3.4	8
15	Knowledge-Based Automation for Smart Manufacturing Systems. IEEE Transactions on Automation Science and Engineering, 2021, 18, 2-4.	5.2	0
16	Model-Driven Approach for Realization of Data Collection Architectures for Cyber-Physical Systems of Systems to Lower Manual Implementation Efforts. Sensors, 2021, 21, 745.	3.8	5
17	Managing Variability and Reuse of Extra-functional Control Software in CPPS. , 2021, , .		6
18	Improve Test Quality by Applying a Clustering-based Test Planning Procedure for Customer Experience Vehicle Functions. , 2021, , .		0

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19	Concepts for Retrofitting Industrial Programmable Logic Controllers for Industrie 4.0 Scenarios. , 2021, , .		3
20	Product Quality Monitoring in Hydraulic Presses Using a Minimal Sample of Sensor and Actuator Data. ACM Transactions on Internet Technology, 2021, 21, 1-23.	4.4	3
21	(Re)deployment of Smart Algorithms in Cyber-Physical Production Systems Using DSL4hDNCS. Proceedings of the IEEE, 2021, 109, 542-555.	21.3	11
22	Automation platform independent multi-agent system for robust networks of production resources in industry 4.0. Journal of Intelligent Manufacturing, 2021, 32, 2023-2041.	7.3	14
23	Anforderungsbasierter Test für die Validierung komplexer Automatisierungssysteme. Automatisierungstechnik, 2021, 69, 417-429.	0.8	3
24	A Metric and Visualization of Completeness in Multi-Dimensional Data Sets of Sensor and Actuator Data Applied to a Condition Monitoring Use Case. Applied Sciences (Switzerland), 2021, 11, 5022.	2.5	0
25	Supporting Maintenance of Variant-Rich Automated Production Systems by Tracing of Variable Signal Paths in Electrical CAD. , 2021, , .		0
26	Cyber-physical production systems for SMEs-A generic multi agent based architecture and case study. , 2021, , .		3
27	Frequency and Impact of Technical Debt Characteristics in Companies Producing Mechatronic Products. , 2021, , .		3
28	An ontology-based approach for preprocessing in machine learning. , 2021, , .		2
29	Potential for combining semantics and data analysis in the context of digital twins. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2021, 379, 20200368.	3.4	12
30	Digital Technologies and Automation: The Human and Eco-Centered Foundations for the Factory of the Future [TC Spotlight]. IEEE Robotics and Automation Magazine, 2021, 28, 174-179.	2.0	6
31	Custom-tailored clone detection for IEC 61131-3 programming languages. Journal of Systems and Software, 2021, 182, 111070.	4.5	12
32	Measuring the Overall Complexity of Graphical and Textual IEC 61131-3 Control Software. IEEE Robotics and Automation Letters, 2021, 6, 5784-5791.	5.1	8
33	Hierarchical Reinforcement Learning for Waypoint-based Exploration in Robotic Devices. , 2021, , .		4
34	Integration of a formal specification approach into CPPS engineering workflow for machinery validation. , 2021, , .		0
35	Industry 4.0 and Industry 5.0-“Inception, conception and perception. Journal of Manufacturing Systems, 2021, 61, 530-535.	13.9	686
36	Modelling Industrial Technical Compromises in Production Systems with Causal Loop Diagrams. IFAC-PapersOnLine, 2021, 54, 212-219.	0.9	4

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37	Modelling technical compromises in electronics manufacturing with BPMN+TD – an industrial use case. IFAC-PapersOnLine, 2021, 54, 912-917.	0.9	3
38	Leveraging the Asset Administration Shell for Agent-Based Production Systems. IFAC-PapersOnLine, 2021, 54, 837-844.	0.9	19
39	Modular Production Control with Multi-Agent Deep Q-Learning. , 2021, , .		7
40	Modelling Production Workflows in Automotive Manufacturing. , 2021, , .		3
41	Towards a Quantitative Time Analysis and Decision Support for the Deployment of AI-Algorithms in Distributed Cyber-Physical Production Systems. , 2021, , .		1
42	An International Case Study on Control Software Development in Large-Scale Plant Manufacturing Companies of One Industrial Sector at Different Locations. , 2021, , .		3
43	Decision Graph and Matrix Visualization during Interdisciplinary Engineering Collaboration. , 2021, , .		0
44	Modellkonsistenz in der Entwicklung von Materialflusssystemen. ZWF Zeitschrift Fuer Wirtschaftlichen Fabrikbetrieb, 2021, 116, 820-825.	0.3	3
45	An approach for leveraging Digital Twins in agent-based production systems. Automatisierungstechnik, 2021, 69, 1026-1039.	0.8	17
46	Leveraging Digital Twins for Compatibility Checks in Production Systems Engineering. , 2021, , .		4
47	Low-entry Barrier Multi-Agent System for Small- and Middle-sized Enterprises in the Sector of Automated Production Systems. , 2021, , .		3
48	Guest Editorial Special Section on the 2018 Conference on Automation Science and Engineering (CASE). IEEE Transactions on Automation Science and Engineering, 2020, 17, 1182-1183.	5.2	0
49	Visual Leakage Inspection in Chemical Process Plants Using Thermographic Videos and Motion Pattern Detection. Sensors, 2020, 20, 6659.	3.8	1
50	Deep Q-learning for the Control of PLC-based Automated Production Systems. , 2020, , .		5
51	Identifying Runtime Issues in Object-Oriented IEC 61131-3-Compliant Control Software using Metrics. , 2020, , .		3
52	Challenges for the digital transformation of development processes in engineering. , 2020, , .		3
53	Safe Three-Dimensional Assembly Line Design for Robots Based on Combined Multiobjective Approach. Applied Sciences (Switzerland), 2020, 10, 8844.	2.5	2
54	Graphical modeling notation for data collection and analysis architectures in cyber-physical systems of systems. Journal of Industrial Information Integration, 2020, 19, 100155.	6.4	10

#	ARTICLE	IF	CITATIONS
55	Interdisciplinary engineering of cyber-physical production systems: highlighting the benefits of a combined interdisciplinary modelling approach on the basis of an industrial case. Design Science, 2020, 6, .	2.1	15
56	Overview and classification of approaches for the simulation of networked control systems. Automatisierungstechnik, 2020, 68, 151-165.	0.8	1
57	The role of spatial, verbal, numerical, and general reasoning abilities in complex word problem solving for young female and male adults. Mathematics Education Research Journal, 2020, 32, 189-211.	1.7	19
58	Design, Application, and Evaluation of a Multiagent System in the Logistics Domain. IEEE Transactions on Automation Science and Engineering, 2020, , 1-14.	5.2	8
59	A Knowledge Based System for Managing Heterogeneous Sources of Engineering Information. IFAC-PapersOnLine, 2020, 53, 10511-10517.	0.9	4
60	Condition monitoring for the Binder Jetting AM-process with machine learning approaches. , 2020, , .		5
61	A Cross-disciplinary Model-Based Systems Engineering Workflow of Automated Production Systems Leveraging Socio-technical Aspects. , 2020, , .		7
62	Towards Providing Feasibility Feedback in Intralogistics Using a Knowledge Graph. , 2020, , .		4
63	Multi-agent systems to enable Industry 4.0. Automatisierungstechnik, 2020, 68, 445-458.	0.8	21
64	Applying Dynamic Programming to Test Case Scheduling for Automated Production Systems. Communications in Computer and Information Science, 2020, , 3-20.	0.5	2
65	Remote Operations. Springer Reference Technik, 2020, , 1-8.	0.0	0
66	Causal Inference in Industrial Alarm Data by Timely Clustered Alarms and Transfer Entropy. , 2020, , .		10
67	Analysis of metamodels for model-based production automation system engineering. IET Collaborative Intelligent Manufacturing, 2020, 2, 45-55.	3.3	4
68	Supporting troubleshooting in machine and plant manufacturing by backstepping of PLC-control software. , 2020, , .		0
69	Using Eye Tracking to Assess User Behavior in Virtual Training. Advances in Intelligent Systems and Computing, 2020, , 341-347.	0.6	1
70	Smart Data Architekturen. Springer Reference Technik, 2020, , 1-25.	0.0	0
71	BPMN+I to support decision making in innovation management for automated production systems including technological, multi team and organizational aspects. IFAC-PapersOnLine, 2020, 53, 10891-10898.	0.9	7
72	Datenqualität in CPPS. Springer Reference Technik, 2020, , 1-11.	0.0	0

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73	Conception and Development of a Support System for Assembly Technology. Lecture Notes in Computer Science, 2020, , 639-657.	1.3	0
74	Handover Abilities in Reconfigurable Material Flow Systems for Topology Computing. Lecture Notes in Logistics, 2020, , 451-461.	0.8	1
75	Comparison of Communication Technologies for Industrial Middlewares and DDS-based Realization. IFAC-PapersOnLine, 2020, 53, 10935-10942.	0.9	2
76	A concept for fault diagnosis combining Case-Based Reasoning with topological system models. IFAC-PapersOnLine, 2020, 53, 8217-8224.	0.9	2
77	Formalization of Design Patterns and Their Automatic Identification in PLC Software for Architecture Assessment. IFAC-PapersOnLine, 2020, 53, 7819-7826.	0.9	8
78	Elektronische Datenverarbeitung â€œ Agentenbasiertes Steuern. , 2020, , 143-150.		0
79	Automatisierte Generierung von Sicherheitstests fÃ¼r variantenreiche Produktionssysteme mittels ECAD. Automatisierungstechnik, 2020, 68, 375-386.	0.8	2
80	Relational Test Tables. , 2020, , .		2
81	Machine-Learning Models on the Edge to reduce Data Volume in Wide-Area Networks between various Production Sites. , 2020, , .		4
82	Current Challenges in the Design of Drives for Robot-Like Systems. , 2020, , .		7
83	Variability Visualization of IEC 61131-3 Legacy Software for Planned Reuse. , 2020, , .		3
84	A Framework for Automatic Initialization of Multi-Agent Production Systems Using Semantic Web Technologies. IEEE Robotics and Automation Letters, 2019, 4, 4330-4337.	5.1	25
85	Cyber-physical production systems architecture based on multi-agentâ€™s design patternâ€™ comparison of selected approaches mapping four agent patterns. International Journal of Advanced Manufacturing Technology, 2019, 105, 4005-4034.	3.0	74
86	Reverse Engineering on changed Functional Specification Documents for Model-Based Requirements Engineering. , 2019, , .		1
87	Key Directions for Industrial Agent Based Cyber-Physical Production Systems. , 2019, , .		29
88	Learning from Evolution for Evolution. , 2019, , 255-308.		1
89	Effective Innovation Implementation of Mechatronic Product-Service Systems Considering Socio-Technical Aspects. Proceedings of the Design Society International Conference on Engineering Design, 2019, 1, 3051-3060.	0.6	2
90	Applying knowledge bases to make factories smarter. Automatisierungstechnik, 2019, 67, 504-517.	0.8	10

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91	A Pragmatic Approach Towards Leveraging Employee Competences by Use of Semantic Web Technologies. Proceedings of the Design Society International Conference on Engineering Design, 2019, 1, 1045-1054.	0.6	1
92	Inconsistency Management in Heterogeneous Models - An Approach for the Identification of Model Dependencies and Potential Inconsistencies. Proceedings of the Design Society International Conference on Engineering Design, 2019, 1, 3661-3670.	0.6	8
93	Dynamic Resource Task Negotiation to Enable Product Agent Exploration in Multi-Agent Manufacturing Systems. IEEE Robotics and Automation Letters, 2019, 4, 2854-2861.	5.1	27
94	An Adaptive Virtual Training System Based on Universal Design. IFAC-PapersOnLine, 2019, 51, 335-340.	0.9	15
95	Analyzing Variability in Automation Software with the Variability Analysis Toolkit. , 2019, , .		13
96	Scientific fundamentals of Industry 4.0. Automatisierungstechnik, 2019, 67, 502-503.	0.8	2
97	Applying Semantic Web Technologies to Provide Feasibility Feedback in Early Design Phases. Journal of Computing and Information Science in Engineering, 2019, 19, .	2.7	8
98	Technical Debt as indicator for weaknesses in engineering of automated production systems. Production Engineering, 2019, 13, 273-282.	2.3	12
99	System architectures for Industrie 4.0 applications. Production Engineering, 2019, 13, 247-257.	2.3	64
100	Application of a multi-disciplinary design approach in a mechatronic engineering toolchain. Automatisierungstechnik, 2019, 67, 246-269.	0.8	7
101	Managing inter-model inconsistencies in model-based systems engineering: Application in automated production systems engineering. Journal of Systems and Software, 2019, 153, 105-134.	4.5	41
102	Leveraging inconsistency management in the multi-view collaborative modelling of cyber-physical production systems. IET Collaborative Intelligent Manufacturing, 2019, 1, 126-129.	3.3	3
103	Increasing Awareness for Potential Technical Debt in the Engineering of Production Systems. , 2019, , .		3
104	Data-Driven Condition Monitoring of Control Valves in Laboratory Test Runs. , 2019, , .		0
105	Concept and Evaluation of a Technology-independent Data Collection Architecture for Industrial Automation. , 2019, , .		5
106	Similarity Analysis of Control Software Using Graph Mining. , 2019, , .		4
107	On the Preservation of the Trust by Regression Verification of PLC software for Cyber-Physical Systems of Systems. , 2019, , .		2
108	Adapting Virtual Training Systems for Industrial Procedures to the Needs of Older People. , 2019, , .		1

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109	An Industrial Evaluation of Test Prioritisation Criteria and Metrics. , 2019, , .		3
110	A Qualitative Study of Industry 4.0 Use Cases and their Implementation in Electronics Manufacturing. , 2019, , .		1
111	Automatic Visual Leakage Inspection by Using Thermographic Video and Image Analysis. , 2019, , .		2
112	Exploring Docker Containers for Time-sensitive Applications in Networked Control Systems. , 2019, , .		5
113	Analyzing Studentsâ€™ Mental Models of Technical Systems. , 2019, , .		3
114	An Approach to Efficient Test Scheduling for Automated Production Systems. , 2019, , .		5
115	Investigating Mental Models of Mechanical Engineering Students. , 2019, , .		2
116	A Multi-Agent Approach for Hybrid Intrusion Detection in Industrial Networks: Design and Implementation. , 2019, , .		3
117	PPR Based Cost Estimation of Changes in Automated Production Systems. , 2019, , .		0
118	Effiziente Initialisierung von Steuerungsparametern f¼r Cyber-Physische Produktionssysteme via Multi-Ebenen-Optimierung. Automatisierungstechnik, 2019, 67, 477-489.	0.8	0
119	Using Real-time Feedback in a Training System for Manual Procedures. IFAC-PapersOnLine, 2019, 52, 241-246.	0.9	6
120	Introduction and Evaluation of Complexity Metrics for Network-based, Graphical IEC 61131-3 Programming Languages. , 2019, , .		8
121	Herausforderungen in der interdisziplinÄren Entwicklung von Cyber-Physischen Produktionssystemen. Automatisierungstechnik, 2019, 67, 445-454.	0.8	3
122	Graphical Modeling of Communication Architectures in Network Control Systems with Traceability to Requirements. , 2019, , .		3
123	Automatic Synchronization of Mechanical CAD Models and a SysML-based Mechatronic Model using AutomationML. , 2019, , .		4
124	Visualization of Variability Analysis of Control Software From Industrial Automation Systems. , 2019, , .		1
125	The Nature of Software Evolution. , 2019, , 9-20.		3
126	Online parameter estimation for cyber-physical production systems based on mixed integer nonlinear programming, process mining and black-box optimization techniques. Automatisierungstechnik, 2018, 66, 331-343.	0.8	10

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127	Increasing system test coverage in production automation systems. Control Engineering Practice, 2018, 73, 171-185.	5.5	10
128	Analyzing the industrial scalability of backwards compatible intralogistics systems. Production Engineering, 2018, 12, 297-307.	2.3	1
129	Industrially Applicable System Regression Test Prioritization in Production Automation. IEEE Transactions on Automation Science and Engineering, 2018, 15, 1839-1851.	5.2	19
130	Automatic Parameter Estimation for Reusable Software Components of Modular and Reconfigurable Cyber-Physical Production Systems in the Domain of Discrete Manufacturing. IEEE Transactions on Industrial Informatics, 2018, 14, 275-282.	11.3	48
131	Change analysis on evolving PLC software in automated production systems. Automatisierungstechnik, 2018, 66, 806-818.	0.8	2
132	A Testbed for Evaluating QoS of Different Classes of Industrial Ethernet Protocols Based on Raspberry Pi. , 2018, , .		5
133	Towards verified continuous integration in the engineering of automated production systems. Automatisierungstechnik, 2018, 66, 784-794.	0.8	2
134	Identifying Design Pattern for Agent Based Production System Control. , 2018, , .		1
135	Bringing Automated Intelligence to Cyber-Physical Production Systems in Factory Automation. , 2018, , .		10
136	Consistent Automated Production Systems Modeling in a Multi-disciplinary Engineering Workflow. , 2018, , .		8
137	Achieving delta description of the control software for an automated production system evolution. , 2018, , .		1
138	Data-Driven Approach to Support Experts in the Identification of Operational States in Industrial Process Plants. , 2018, , .		3
139	A Cross-Disciplinary Language for Change Propagation Rules. , 2018, , .		2
140	System evolution through semi-automatic elicitation of security requirements: A Position Paper – Research supported by the DFG (German Research Foundation) in Priority Programme SPP1593: Design for Future - Managed Software Evolution (VO 937/20-2 and JU 2734/2-2).. IFAC-PapersOnLine, 2018, 51, 64-69.	0.9	2
141	Technical Debt indication in PLC Code for automated Production Systems: Introducing a Domain Specific Static Code Analysis Tool. IFAC-PapersOnLine, 2018, 51, 70-75.	0.9	2
142	Improving the software engineering of brew house plants by modularizing the control software. IFAC-PapersOnLine, 2018, 51, 241-248.	0.9	0
143	Integrating Haptic Interaction into a Virtual Training System for Manual Procedures in Industrial Environments. IFAC-PapersOnLine, 2018, 51, 60-65.	0.9	8
144	Key maturity indicators for module libraries for PLC-based control software in the domain of automated Production Systems. IFAC-PapersOnLine, 2018, 51, 1610-1617.	0.9	9

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145	Platform Independent Multi-Agent System for Robust Networks of Production Systems. IFAC-PapersOnLine, 2018, 51, 1261-1268.	0.9	16
146	Graph-based Grouping of Statistical Dependent Alarms in Automated Production Systems. IFAC-PapersOnLine, 2018, 51, 395-400.	0.9	3
147	Cross-disciplinary and cross-life-cycle-phase Technical Debt in automated Production Systems: two industrial case studies and a survey. IFAC-PapersOnLine, 2018, 51, 1192-1199.	0.9	12
148	Methodological Approach for the Evaluation of an Adaptive and Assistive Human-Machine System. , 2018, , .		1
149	Integrating Hierarchical Task Analysis into Model-Based System Design using Airbus XHTA and IBM Rational Rhapsody. , 2018, , .		2
150	Methods to support the evolution of Cyber Physical Production Systems. Automatisierungstechnik, 2018, 66, 781-783.	0.8	0
151	A Qualitative Study of Variability Management of Control Software for Industrial Automation Systems. , 2018, , .		25
152	Applicability of generalized test tables: a case study using the manufacturing system demonstrator xPPU. Automatisierungstechnik, 2018, 66, 834-848.	0.8	7
153	Towards Industrial Intrusion Prevention Systems: A Concept and Implementation for Reactive Protection. Applied Sciences (Switzerland), 2018, 8, 2460.	2.5	5
154	Resolving Inconsistencies Optimally in the Model-Based Development of Production Systems. , 2018, , .		7
155	Design Parameter Optimization of Automated Production Systems. , 2018, , .		4
156	Automated Generation of Modular PLC Control Software from P&ID Diagrams in Process Industry. , 2018, , .		6
157	Cyclic Management of Innovative PSS Changes: An Integrated and Interdisciplinary Engineering View. , 2018, , .		1
158	Alarm Flood Analysis by Hierarchical Clustering of the Probabilistic Dependency between Alarms. , 2018, , .		2
159	Preventing Technical Debt For Automated Production System Maintenance Using Systematic Change Effort Estimation With Considering Contingent Cost. , 2018, , .		3
160	Maintainability and evolvability of control software in machine and plant manufacturing – An industrial survey. Control Engineering Practice, 2018, 80, 157-173.	5.5	29
161	A model-based framework for increasing the interdisciplinary design of mechatronic production systems. Journal of Engineering Design, 2018, 29, 617-643.	2.3	26
162	Architecture-based change impact analysis in cross-disciplinary automated production systems. Journal of Systems and Software, 2018, 146, 167-185.	4.5	15

#	ARTICLE	IF	CITATIONS
163	Information Retrieval from Redlined Circuit Diagrams and its Model-Based Representation for Automated Engineering. , 2018, , .		5
164	A Model-Based Approach to Calculate Maintainability Task Lists of PLC Programs for Factory Automation. , 2018, , .		0
165	Model-based development of a multi-agent system for controlling material flow systems. Automatisierungstechnik, 2018, 66, 438-448.	0.8	13
166	Supporting evolution of automated material flow systems as part of CPPS by using coupled meta models. , 2018, , .		6
167	Maturity variations of PLC-based control software within a company and among companies from the same industrial sector. , 2018, , .		7
168	Interaction in Virtual Environments - How to Control the Environment by Using VR-Glasses in the Most Immersive Way. Lecture Notes in Computer Science, 2018, , 183-201.	1.3	4
169	Modularity and architecture of PLC-based software for automated production systems: An analysis in industrial companies (journal-first abstract). , 2018, , .		1
170	Concept and Implementation of a Software Architecture for Unifying Data Transfer in Automated Production Systems. Technologien Fulr Die Intelligente Automation, 2018, , 1-17.	0.5	6
171	Improved alarm flood analysis by cluster identification and alarm assignment. Automatisierungstechnik, 2018, 66, 647-655.	0.8	1
172	Model-based training of manual procedures in automated production systems. Mechatronics, 2018, 55, 212-223.	3.3	8
173	Assessment of variance & distribution in data for effective use of statistical methods for product quality prediction. Automatisierungstechnik, 2018, 66, 344-355.	0.8	3
174	Elektronische Datenverarbeitung â€“ Agentenbasiertes Steuern. , 2018, , 2029-2033.		0
175	1. Dynamische Anbindung und automatische Konfiguration modularer Intralogistiksysteme mittels Agenten. , 2018, , 1-20.		2
176	Softwareagenten in der Industrie 4.0. , 2018, , .		3
177	A flexible architecture for data mining from heterogeneous data sources in automated production systems. , 2017, , .		24
178	Model-document coupling in aPS engineering: Challenges and requirements engineering use case. , 2017, , .		5
179	Modularity and architecture of PLC-based software for automated production Systems: An analysis in industrial companies. Journal of Systems and Software, 2017, 131, 35-62.	4.5	49
180	Interdisciplinary product lines to support the engineering in the machine manufacturing domain. International Journal of Production Research, 2017, 55, 3701-3714.	7.5	7

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181	A configurable partial-order planning approach for field level operation strategies of PLC-based industry 4.0 automated manufacturing systems. Engineering Applications of Artificial Intelligence, 2017, 66, 128-144.	8.1	25
182	Specification, Verification and Design of Evolving Automotive Software. , 2017, , .		2
183	Generation of monitoring functions in production automation using test specifications. , 2017, , .		3
184	An agent-based approach for dependable planning of production sequences in automated production systems. Automatisierungstechnik, 2017, 65, 766-778.	0.8	14
185	A Light-Weight Fault Injection Approach to Test Automated Production System PLC Software in Industrial Practice. Control Engineering Practice, 2017, 58, 12-23.	5.5	20
186	Metrics for software quality in automated production systems as an indicator for technical debt. , 2017, , .		16
187	Metrics for the evaluation of data quality of signal data in industrial processes. , 2017, , .		14
188	Integration of safety aspects in modeling of Networked Control Systems. , 2017, , .		2
189	Scalable cloud based semantic code analysis to support continuous integration of industrial PLC code. , 2017, , .		5
190	Automatic generation of shop floor gateway configurations from systems modeling language. , 2017, , .		3
191	Modeling as the basis for innovation cycle management of PSS: Making use of interdisciplinary models. , 2017, , .		6
192	Adapting the concept of technical debt to software of automated Production Systems focusing on fault handling, mode of operation and safety aspects. IFAC-PapersOnLine, 2017, 50, 5887-5894.	0.9	6
193	Maintenance effort estimation with KAMP4aPS for cross-disciplinary automated PLC-based Production Systems - a collaborative approach. IFAC-PapersOnLine, 2017, 50, 4360-4367.	0.9	8
194	Agenten und ZuverlÄssigkeit â€“ ein Widerspruch?. Automatisierungstechnik, 2017, 65, 719-720.	0.8	0
195	Data-driven model development for quality prediction in forming technology. , 2017, , .		8
196	Feature-based systematic approach development for inconsistency resolution in automated production system design. , 2017, , .		6
197	A priori test coverage estimation for automated production systems: Using generated behavior models for coverage calculation. , 2017, , .		1
198	Failure mode classification for control valves for supporting data-driven fault detection. , 2017, , .		9

#	ARTICLE	IF	CITATIONS
199	Hidden Markov model-based predictive maintenance in semiconductor manufacturing: A genetic algorithm approach. , 2017, , .		7
200	A virtual training system for aging employees in machine operation. , 2017, , .		8
201	A tiered security analysis of Industrial Control System Devices. , 2017, , .		3
202	Current status of software development in industrial practice: Key results of a large-scale questionnaire. , 2017, , .		6
203	Towards modern inclusive factories: A methodology for the development of smart adaptive human-machine interfaces. , 2017, , .		39
204	Generalized test tables: A powerful and intuitive specification language for reactive systems. , 2017, , .		8
205	Towards the co-evolution of industrial products and its production systems by combining models from development and hardware/software deployment in cyber-physical systems. Production Engineering, 2017, 11, 687-694.	2.3	13
206	Increasing adaptability of automation control software for automated material flow systems via software modularization. , 2017, , .		0
207	Management of Inconsistencies in Domain-Spanning Models – An Interactive Visualization Approach. Lecture Notes in Computer Science, 2017, , 71-87.	1.3	2
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