

Alexander Verl

List of Publications by Year in descending order

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283
papers

4,959
citations

218592

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133188

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291
times ranked

3359
citing authors

#	ARTICLE	IF	CITATIONS
1	Maintenance Automation: Methods for Robotics Manipulation Planning and Execution. IEEE Transactions on Automation Science and Engineering, 2023, 20, 1081-1091.	3.4	1
2	Robust design of independent joint control of industrial robots with secondary encoders. Robotics and Computer-Integrated Manufacturing, 2022, 73, 102232.	6.1	20
3	Multi-axis 3D printing of gelatin methacryloyl hydrogels on a non-planar surface obtained from magnetic resonance imaging. Additive Manufacturing, 2022, 50, 102566.	1.7	10
4	Modeling and Identification of Hysteresis in Robot Joints with Cycloidal Drives. , 2022, , .		1
5	Experimental Evaluation of the Deterministic Wireless Communication System Industrial LTE. , 2022, , .		0
6	Identification and Classification of the Communication Data of Automated Guided Vehicles and Autonomous Mobile Robots. , 2022, , .		1
7	Hybrid manufacturing of topology optimized machine tool parts through a layer laminated manufacturing method. Production Engineering, 2022, 16, 493-502.	1.1	2
8	Online Parameterization of a Milling Force Model using an Intelligent System Architecture and Bayesian Optimization. Procedia CIRP, 2022, 107, 1041-1046.	1.0	2
9	Part Variation Modeling to Avoid Scrap Parts in Multi-stage Production Systems. Procedia CIRP, 2022, 107, 851-856.	1.0	1
10	Camera-based Process Monitoring for Powder Bed Additive Manufacturing in Construction. Procedia CIRP, 2022, 107, 534-539.	1.0	2
11	Model-based automatic generation of digital twin models for the simulation of reconfigurable manufacturing systems for timber construction. Procedia CIRP, 2022, 107, 387-392.	1.0	11
12	Orientation smoothing in multi-axis additive manufacturing. Procedia CIRP, 2022, 107, 357-362.	1.0	3
13	Data Model for Adaptive Robotic Construction in Architecture. Procedia CIRP, 2022, 107, 1035-1040.	1.0	1
14	Adaptive compensation of the transmission errors in rack-and-pinion drives. CIRP Annals - Manufacturing Technology, 2022, , .	1.7	1
15	The ArchIBALD Data Integration Platform: Bridging Fragmented Processes in the Building Industry. Lecture Notes in Business Information Processing, 2022, , 45-54.	0.8	1
16	Zero-Waste Production of Lightweight Concrete Structures with Water-Soluble Sand Formwork. RILEM Bookseries, 2022, , 3-8.	0.2	1
17	Adaptive CAM planning to support co-design in the building industry. Procedia CIRP, 2022, 109, 78-83.	1.0	0
18	Implementation of Surface Interpolators for Compound Surfaces without C2-continuity. Procedia CIRP, 2022, 109, 19-24.	1.0	1

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19	Time-optimal Path Planning of Multi-axis CNC Processes Using Variability of Orientation. Procedia CIRP, 2021, 96, 324-329.	1.0	5
20	Workspace Planning for In-Operation-Reconfiguration of Cable-Driven Parallel Robots. Mechanisms and Machine Science, 2021, , 182-193.	0.3	4
21	Konzeption eines zweiachsigen Impulsaktors/Design of a two-axis impact-based actuator " Abrupt accelerations for sharp contours of feed drives based on a new drive concept. WT Werkstattstechnik, 2021, 111, 282-285.	0.1	0
22	Smartes Assistenzsystem zur Anforderungserhebung/From customer idea to plant and machinery manufacturer " An intelligent assistance system for requirements elicitation. WT Werkstattstechnik, 2021, 111, 295-299.	0.1	0
23	Arithmetic Coding for Floating-Point Numbers. , 2021, , .		3
24	Integrative data processing for cyber-physical off-site and on-site construction promoting co-design. Procedia CIRP, 2021, 100, 451-456.	1.0	6
25	Implementation of an Intelligent System Architecture for Process Monitoring of Machine Tools. Procedia CIRP, 2021, 96, 342-346.	1.0	7
26	Challenges of Linearization-based Control of Industrial Robots with Cycloidal Drives. , 2021, , .		3
27	Acceleration-based disturbance compensation for elastic rack-and-pinion drives. Production Engineering, 2021, 15, 791.	1.1	2
28	Cascaded sliding mode position control (SMC-PI) for an improved dynamic behavior of elastic feed drives. International Journal of Machine Tools and Manufacture, 2021, 169, 103796.	6.2	9
29	Learning Feedforward Control for Laser Powder Bed Fusion. Procedia CIRP, 2021, 96, 127-132.	1.0	9
30	Störgrößenkompensation für Vorschubantriebe/Disturbance compensation for feed drives. WT Werkstattstechnik, 2021, 111, 82-87.	0.1	1
31	Velocity Based Hybrid Position-Force Control of Cable Robots and Experimental Workspace Analysis. Mechanisms and Machine Science, 2021, , 230-242.	0.3	4
32	Kinematic Trajectory Following Control For Constrained Deformable Linear Objects. , 2021, , .		0
33	Generating Reinforcement Learning Environments for Industrial Communication Protocols. , 2021, , .		1
34	Planning of Curvature-Optimal Smooth Paths for Industrial Robots Using Neural Networks. , 2021, , .		1
35	Ein semiaktiver Ansatz zur Verbesserung des dynamischen Verhaltens/Vibration damping on industrial robots " A semi-active approach to improve the dynamic behavior. WT Werkstattstechnik, 2021, 111, 622-627.	0.1	0
36	Hybrid Commissioning of Production Plants. , 2021, , .		1

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37	Tracking Branched Deformable Linear Objects With Structure Preserved Registration by Branch-wise Probability Modification. , 2021, , .		4
38	Human-Robot Collaborative Workflows for Reconfigurable Fabrication Systems in Timber Prefabrication using Augmented Reality. , 2021, , .		0
39	Latency optimized architectures for a real-time inference pipeline for control tasks. , 2021, , .		0
40	Drive-Based Vibration Damping Control for Robot Machining. IEEE Robotics and Automation Letters, 2020, 5, 564-571.	3.3	11
41	Method for generating manufacturable, topology-optimized parts for Laminated Layer Manufacturing. Procedia CIRP, 2020, 93, 38-43.	1.0	3
42	TSN-based Converged Industrial Networks: Evolutionary Steps and Migration Paths. , 2020, , .		7
43	Adaptive PWM Modulation for an Increased Energy Efficiency of Industrial Drives. , 2020, , .		1
44	Predicting coupling signals in a material flow real-time co-simulation with a Kalman filter. Procedia CIRP, 2020, 88, 9-14.	1.0	2
45	Disturbance Observer-Based Controller for Mimicking Mandibular Motion and Studying Temporomandibular Joint Reaction Forces by a Chewing Robot. , 2020, , .		1
46	A model-based and software-assisted safety assessment concept for reconfigurable PnP-systems. Procedia CIRP, 2020, 93, 359-364.	1.0	7
47	Reaching Zero-Defect Manufacturing by Compensation of Dimensional Deviations in the Manufacturing of Rotating Hollow Parts. Procedia Manufacturing, 2020, 51, 388-393.	1.9	7
48	Prediction of the configuration of objects in a bin based on synthetic sensor data. Procedia CIRP, 2020, 88, 54-59.	1.0	4
49	Generation of OPC UA Companion Specification with Eclipse Modeling Framework. , 2020, , .		6
50	A software architecture for a multi-axis additive manufacturing path-planning tool. Procedia CIRP, 2020, 88, 433-438.	1.0	4
51	Impact-based feed drive actuator for discontinuous motion profiles. Production Engineering, 2020, 14, 157-163.	1.1	2
52	Optimizing the Torque Distribution of a Redundantly Actuated Parallel Robot to Study the Temporomandibular Reaction Forces During Food Chewing. Journal of Mechanisms and Robotics, 2020, 12, .	1.5	9
53	On Kinetostatics and Workspace Analysis of Multi-platform Cable-Driven Parallel Robots with Unlimited Rotation. Mechanisms and Machine Science, 2020, , 79-90.	0.3	0
54	Steuerungen. , 2020, , 1099-1123.		0

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55	Distributed Interpolation: Synchronization of motion-controlled axes with coordination vector and decentralized segment controllers. , 2020, , .		2
56	Virtual Commissioning Simulation as Reinforcement Learning Environment for Robot Cable Handling. , 2020, , .		3
57	Engineering Service for the Distribution of Embedded Control Code in Automation Technology. , 2020, , .		0
58	Nonlinear Trajectory Control for Deformable Linear Objects based on Physics Simulation. , 2020, , .		1
59	Kinematic Multibody Model Generation of Deformable Linear Objects from Point Clouds. , 2020, , .		7
60	Geschwindigkeitssprünge an Vorschubachsen. Atp Magazin, 2020, 62, 86-93.	0.3	0
61	Synchronization of a distributed interpolation application via cross-coupled control. , 2019, , .		4
62	Framework for the Closed-Form Calculation of Forward and Inverse Kinematics for Basic Kinematics in Reconfigurable Multi-Component Systems. , 2019, , .		0
63	Part Variation Modeling in Multi-Stage Production Systems for Zero-Defect Manufacturing. , 2019, , .		7
64	Realization of Data Analytics Projects in Manufacturing Using a Microservice-Based Approach. , 2019, , .		3
65	Smart centering for rotation-symmetric parts in multi-stage production systems for zero-defect manufacturing. Procedia CIRP, 2019, 79, 27-32.	1.0	6
66	Test case generation for production systems with model-implemented fault injection consideration. Procedia CIRP, 2019, 79, 268-273.	1.0	1
67	Real-time co-simulation for the virtual commissioning of production systems. Procedia CIRP, 2019, 79, 397-402.	1.0	35
68	Method for load-capable path planning in multi-axis fused deposition modeling. Procedia CIRP, 2019, 84, 335-340.	1.0	9
69	Robots in machining. CIRP Annals - Manufacturing Technology, 2019, 68, 799-822.	1.7	216
70	Design, Implementation and Long-Term Running Experiences of the Cable-Driven Parallel Robot CaRo Printer. Mechanisms and Machine Science, 2019, , 379-390.	0.3	4
71	A novel I4.0-enabled engineering method and its evaluation. International Journal of Advanced Manufacturing Technology, 2019, 102, 2245-2263.	1.5	9
72	Configuration of Application Layer Protocols within Real-time I4.0 Components. , 2019, , .		6

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73	Cloud Manufacturing: An Automated Literature Review. Procedia CIRP, 2019, 86, 251-256.	1.0	3
74	Reinforcement Learning Approach to Vibration Compensation for Dynamic Feed Drive Systems. , 2019, , .		2
75	Virtual Network Topologies for Real-time I4.0 Components based on Time-Sensitive Networking. , 2019, , .		1
76	Automated OPC UA address space generation from existing data structures. , 2019, , .		6
77	Reinforcement Learning of a Robot Cell Control Logic using a Software-in-the-Loop Simulation as Environment. , 2019, , .		8
78	Interpolation of CNC Toolpaths using Generative Adversarial Networks. , 2019, , .		0
79	Web-based Platform for Data Analysis and Monitoring. Procedia CIRP, 2019, 86, 31-36.	1.0	1
80	Nature As Source Of Ideas For Modern Manufacturing Methods. , 2019, , 84-91.		0
81	Motion superimposition for machine tool trajectories using asynchronous axis interpolation. IFAC-PapersOnLine, 2019, 52, 300-305.	0.5	0
82	A control model for downstream compensation strategy in multi-stage manufacturing systems of complex parts. IFAC-PapersOnLine, 2019, 52, 1473-1478.	0.5	6
83	Die Natur als Ideengeber für moderne Fertigungstechniken. , 2019, , 84-91.		0
84	Schnecken als lebende 3-D-Drucker: freie Formen für die Architektur von morgen. , 2019, , 126-133.		0
85	Snails as living 3D printers: free forms for the architecture of tomorrow. , 2019, , 126-133.		1
86	Rosenstein Pavilion: a lightweight concrete shell based on principles of biological structures. , 2019, , 92-101.		1
87	Static Analysis of a Two-Platform Planar Cable-Driven Parallel Robot with Unlimited Rotation. Mechanisms and Machine Science, 2019, , 121-133.	0.3	6
88	Einführung in die industrielle Robotik mit Mensch-Roboter-Kooperation. , 2019, , 1-35.		3
89	Methoden zur erfolgreichen Einführung von MRK. , 2019, , 311-359.		0
90	Rosenstein-Pavillon: eine leichte Betonschale nach dem Vorbild biologischer Strukturen. , 2019, , 92-101.		0

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91	A Review of Research Aspects of Redundantly Actuated Parallel Robots for Enabling Further Applications. IEEE/ASME Transactions on Mechatronics, 2018, 23, 1259-1269.	3.7	29
92	Measurement of the controlled variable during heating of Ti6Al4V for thixoforging. Materials Research Express, 2018, 5, 026508.	0.8	2
93	Online Learning of Stability Lobe Diagrams in Milling. Procedia CIRP, 2018, 67, 278-283.	1.0	19
94	A novel rapid additive manufacturing concept for architectural composite shell construction inspired by the shell formation in land snails. Bioinspiration and Biomimetics, 2018, 13, 026010.	1.5	13
95	A cyber-physical system for quality-oriented assembly of automotive electric motors. CIRP Journal of Manufacturing Science and Technology, 2018, 20, 12-22.	2.3	25
96	Efficient Task and Path Planning for Maintenance Automation Using a Robot System. IEEE Transactions on Automation Science and Engineering, 2018, 15, 1205-1215.	3.4	9
97	Platform for Information Exchange in Versatile Production Systems. , 2018, , .		0
98	A Novel Method for Agile Planning Production Systems based on 3D Digitalization. , 2018, , .		7
99	Reinforcement Learning of Material Flow Control Logic Using Hardware-in-the-Loop Simulation. , 2018, , .		11
100	Real-Time Ethernet over Power Line. , 2018, , .		0
101	Challenges and requirements for the safety compliant operation of reconfigurable manufacturing systems. Procedia CIRP, 2018, 72, 1100-1105.	1.0	19
102	Automatic Close-optimal Workpiece Positioning for Robotic Manufacturing.. Procedia CIRP, 2018, 72, 277-284.	1.0	6
103	Persistent data backend for OPC UA namespaces in IT infrastructures. Procedia CIRP, 2018, 72, 174-178.	1.0	6
104	Model-based method for condition monitoring and diagnosis of compressors. Procedia CIRP, 2018, 72, 1321-1326.	1.0	10
105	User Interface for the Acquisition and Characterization of Defects and Performed Rework in Multi-Stage Production Systems. Procedia CIRP, 2018, 78, 243-248.	1.0	4
106	Dynamic Real-time Orchestration of I4.0 Components based on Time-Sensitive Networking. Procedia CIRP, 2018, 72, 910-915.	1.0	18
107	On achieving accuracy and efficiency in Additive Manufacturing: Requirements on a hybrid CAM system. Procedia CIRP, 2018, 72, 1512-1517.	1.0	18
108	Correlation analysis methods in multi-stage production systems for reaching zero-defect manufacturing. Procedia CIRP, 2018, 72, 635-640.	1.0	29

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109	Erratum to "A Review of Research Aspects of Redundantly Actuated Parallel Robots for Enabling Further Applications" [Jun 18 1259-1269]. IEEE/ASME Transactions on Mechatronics, 2018, 23, 2531-2531.	3.7	0
110	Towards Real-Time Capable Simulations with a Containerized Simulation Environment. , 2018, , .		3
111	Camera based path planning for low quantity - high variant manufacturing with industrial robots. , 2018, , .		1
112	Digital Twins of Manufacturing Systems as a Base for Machine Learning. , 2018, , .		43
113	Generative models for direct generation of CNC toolpaths. , 2018, , .		1
114	Knowledge Capturing Platform in Multi-Stage Production Systems for Zero-Defect Manufacturing. , 2018, , .		8
115	Experimental determination of compliance values for a machining robot. , 2018, , .		0
116	A Novel Spatial Mandibular Motion-Capture System Based on Planar Fiducial Markers. IEEE Sensors Journal, 2018, 18, 10096-10104.	2.4	13
117	Responsive and Reactive Dual-Arm Robot Coordination. , 2018, , .		3
118	A Radar-Based Terrain Mapping Approach for Stair Detection Towards Enhanced Prosthetic Foot Control. , 2018, , .		16
119	End-to-end Redundancy between Real-time I4.0 Components based on Time-Sensitive Networking. , 2018, , .		10
120	Simulation of Industrial Bin Picking: An Application of Laser Range Finder Simulation. , 2018, , .		5
121	A Container-based Architecture for Real-Time Control Applications. , 2018, , .		36
122	Adaptive preloading for rack-and-pinion drive systems. CIRP Annals - Manufacturing Technology, 2018, 67, 369-372.	1.7	8
123	Control-based compensation of friction and backlash within rack-and-pinion drives. Production Engineering, 2018, 12, 589-596.	1.1	4
124	Hardware-in-the-Loop Simulation for Machines based on a Multi-Rate Approach. , 2018, , .		3
125	POSE AND FEED-DIRECTION DEPENDENCY ANALYSIS FOR MILLING TASKS WITH INDUSTRIAL ROBOTS. DEStech Transactions on Engineering and Technology Research, 2018, , .	0.0	2
126	Echtzeit-Co-Simulation für die Virtuelle Inbetriebnahme. Atp Magazin, 2018, 60, 44-55.	0.3	5

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127	Engineering mit cyber-physischen Systemen. Atp Magazin, 2018, 60, 68-78.	0.3	1
128	Estimation of stability lobe diagrams in milling with continuous learning algorithms. Robotics and Computer-Integrated Manufacturing, 2017, 43, 124-134.	6.1	40
129	Motion Control for Novel Emerging Robotic Devices and Systems. IEEE Transactions on Industrial Electronics, 2017, 64, 1623-1625.	5.2	2
130	Workpiece and Machine Design in Additive Manufacturing for Multi-Axis Fused Deposition Modeling. Procedia CIRP, 2017, 60, 229-234.	1.0	54
131	A Clothoid based real-time interpolation concept for path smoothing. , 2017, , .		1
132	Energy control system for energy-efficient control of machine tools. Production Engineering, 2017, 11, 85-91.	1.1	2
133	Fast robot task and path planning based on CAD and vision data. , 2017, , .		2
134	Evaluation of Clothoids in Manufacturing Context. Procedia CIRP, 2017, 62, 541-546.	1.0	3
135	Innovative control of assembly systems and lines. CIRP Annals - Manufacturing Technology, 2017, 66, 707-730.	1.7	86
136	Cloud-Based Control Strategy: Downstream Defect Reduction in the Production of Electric Motors. IEEE Transactions on Industry Applications, 2017, 53, 5348-5353.	3.3	15
137	A new control principle to increase the bandwidth of feed drives with large inertia ratio. International Journal of Advanced Manufacturing Technology, 2017, 91, 1747-1752.	1.5	5
138	Analysis of the dynamic behavior of a six-axis industrial robot within the entire workspace in respect of machining tasks. , 2017, , .		13
139	A cloud-based control architecture design for the interaction of industrial robots with soft objects. , 2017, , .		3
140	Deformable shape registration using surface-based free-form deformations in robotic welding. , 2017, , .		0
141	Visual perception for robot based maintenance automation. , 2017, , .		1
142	Environment modeling for maintenance automation-a next-best-view approach for combining space exploration and object recognition tasks. , 2017, , .		2
143	Roadmap for in-vitro investigation of interaction between food and teeth. , 2017, , .		3
144	Simulation-assisted run-to-run control for battery manufacturing in a cloud environment. , 2017, , .		4

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145	Concept for a simulation-based approach towards automated handling of deformable objects – A bin picking scenario. , 2017, , .		6
146	On solving the inverse kinematics problem using neural networks. , 2017, , .		41
147	Automatic Motion Generation for Robotic Milling Optimizing Stiffness with Sample-Based Planning. Machines, 2017, 5, 3.	1.2	15
148	Automated Planning of Robotic MAG Welding Based on Adaptive Gap Model. Procedia CIRP, 2017, 62, 612-617.	1.0	5
149	Manufacturing Task Description for Robotic Welding and Automatic Feature Recognition on Product CAD Models. Procedia CIRP, 2017, 60, 122-127.	1.0	22
150	Parallelization of Real-time Control Algorithms on Multi-core Architectures using Ant Colony Optimization. , 2017, , .		0
151	Modularly Structured, (Re-)Configurable Machines for Micro Machining by Means of Cooperative Motion Generation. Lecture Notes in Production Engineering, 2017, , 213-229.	0.3	0
152	Improving robotic machining accuracy through experimental error investigation and modular compensation. International Journal of Advanced Manufacturing Technology, 2016, 85, 3-15.	1.5	85
153	High accurate robotic drilling with external sensor and compliance model-based compensation. , 2016, , .		20
154	On the Dynamics and Emergency Stop Behavior of Cable-Driven Parallel Robots. CISM International Centre for Mechanical Sciences, Courses and Lectures, 2016, , 431-438.	0.3	0
155	Detection of Workpiece Shape Deviations for Tool Path Adaptation in Robotic Deburring Systems. Procedia CIRP, 2016, 57, 545-550.	1.0	27
156	Cloud-based control for downstream defect reduction in the production of electric motors. , 2016, , .		8
157	A planning system for generating manipulation sequences for the automation of maintenance tasks. , 2016, , .		6
158	The control architecture RoViDiAsS – A robotic visual disassembly and assembly system. , 2016, , .		3
159	Fabrication of Biomimetic and Biologically Inspired (Modular) Structures for Use in the Construction Industry. Biologically-inspired Systems, 2016, , 319-339.	0.4	3
160	Methodology to Identify Applications for Collaborative Robots in Powertrain Assembly. Procedia CIRP, 2016, 55, 12-17.	1.0	22
161	Automatic optimal motion generation for robotic manufacturing processes: Optimal collision avoidance in robotic welding. , 2016, , .		2
162	Introducing Process Building Blocks for Designing Human Robot Interaction Work Systems and Calculating Accurate Cycle Times. Procedia CIRP, 2016, 44, 216-221.	1.0	18

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163	Approach for a General Pose-dependent Model of the Dynamic Behavior of Large Lightweight Machine Tools for Vibration Reduction. Procedia CIRP, 2016, 41, 812-817.	1.0	10
164	Multi-level Energy Demand Optimizer System for Machine Tool Controls. Procedia CIRP, 2016, 41, 783-788.	1.0	9
165	Analysis and Design of Computerized Numerical Controls for Execution on Multi-core Systems. Procedia CIRP, 2016, 41, 864-869.	1.0	5
166	An Interpolation Concept for Linear Blending Based on Cornu Spiral. Procedia CIRP, 2016, 46, 348-351.	1.0	6
167	On-line learning artificial neural networks for stability classification of milling processes. , 2016, , .		5
168	Online parameter identification for a linear parameter-varying model of large-scale lightweight machine tool structures with pose-dependent dynamic behavior. , 2016, , .		0
169	Automated Control System Generation Out of the Virtual Machine. Procedia Technology, 2016, 26, 349-356.	1.1	6
170	CESA³R: Highly versatile plug-and-produce assembly system. , 2016, , .		10
171	Sliding bearing with adjustable friction properties. CIRP Annals - Manufacturing Technology, 2016, 65, 353-356.	1.7	16
172	Concept of a computerized numerical control kernel for execution on multi-core processors. , 2016, , .		1
173	Control-integrated consumption graph-based optimisation method for energy reduction of machine tools with automated parameter optimisation. International Journal of Computer Integrated Manufacturing, 2016, 29, 1307-1316.	2.9	6
174	SchwingungsdÄmpfung bei Industrierobotern. Atp Magazin, 2016, 58, 48-55.	0.3	0
175	Automatic Variant Configuration and Generation of Simulation Models for Comparison of Plant and Machinery Variants. Procedia CIRP, 2015, 29, 62-67.	1.0	3
176	CNC Tool Path Generation on Multi-Core Processors. Applied Mechanics and Materials, 2015, 794, 339-346.	0.2	4
177	Automatic pose optimization for robotic processes. , 2015, , .		15
178	Knowledge-based cost engineering for industrial robot systems. , 2015, , .		1
179	Time constant measurement for control of induction heating processes for thixoforming. Measurement Science and Technology, 2015, 26, 025001.	1.4	3
180	Selective rotor Assembly Using Fuzzy Logic in the Production of Electric Drives. Procedia CIRP, 2015, 33, 550-555.	1.0	8

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181	Flexible and Modular Control and Manufacturing System. <i>Procedia CIRP</i> , 2015, 33, 115-120.	1.0	22
182	Making existing production systems Industry 4.0-ready. <i>Production Engineering</i> , 2015, 9, 143-148.	1.1	231
183	Special issue WGP: "Assembly, Handling and Industrial Robotics" <i>Production Engineering</i> , 2014, 8, 689-689.	1.1	0
184	Communication Mechanisms for Cloud based Machine Controls. <i>Procedia CIRP</i> , 2014, 17, 830-834.	1.0	24
185	Flexible, Self-configuring Control System for a Modular Production System. <i>Procedia Technology</i> , 2014, 15, 398-405.	1.1	20
186	Design and Evaluation of In-line Product Repair Strategies for Defect Reduction in the Production of Electric Drives. <i>Procedia CIRP</i> , 2014, 21, 159-164.	1.0	21
187	Adaptive Friction Bearing for Reduction of Stick-Slip Effects. <i>Advanced Materials Research</i> , 2014, 1018, 351-356.	0.3	0
188	The Printed Machine Tool for Micro Machining. <i>Advanced Materials Research</i> , 2014, 1018, 433-440.	0.3	1
189	A Robust Algorithm for Autotuning Controllers in Mechatronic Modules. <i>Advanced Materials Research</i> , 2014, 1018, 451-458.	0.3	0
190	Modeling, simulation and validation of material flow on conveyor belts. <i>Applied Mathematical Modelling</i> , 2014, 38, 3295-3313.	2.2	51
191	Double nut ball screw with improved operating characteristics. <i>CIRP Annals - Manufacturing Technology</i> , 2014, 63, 361-364.	1.7	31
192	Autonomous Systems for Maintenance Tasks " Requirements and Design of a Control Architecture. <i>Procedia Technology</i> , 2014, 15, 595-604.	1.1	16
193	A Model- and Signal-based Power Consumption Monitoring Concept for Energetic Optimization of Machine Tools. <i>Procedia CIRP</i> , 2014, 15, 44-49.	1.0	31
194	Stiffness modeling of industrial robots for deformation compensation in machining. , 2014, , .		33
195	Vision-based robust road lane detection in urban environments. , 2014, , .		32
196	Grasping devices and methods in automated production processes. <i>CIRP Annals - Manufacturing Technology</i> , 2014, 63, 679-701.	1.7	180
197	Generation of rotation matrix for assembly models with arbitrary angle constraints. <i>International Journal of Advanced Manufacturing Technology</i> , 2014, 74, 563-568.	1.5	4
198	Connecting factories and related IT environments to manufacturing clouds. <i>International Journal of Manufacturing Research</i> , 2014, 9, 389.	0.1	3

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199	A First Step towards Cross-Platform Integration in Modular Micro-assembly Systems – Concept for a Process Module Construction Kit. , 2014, , 35-40.		2
200	Feeding of Small Components Using the Surface Tension of Fluids. Lecture Notes in Computer Science, 2014, , 47-51.	1.0	2
201	Analysis of CNC software modules regarding parallelization capability. , 2014, , .		7
202	Process Module Construction Kit for Modular Micro Assembly Systems. Lecture Notes in Computer Science, 2014, , 126-132.	1.0	0
203	Modular Workpiece Carrier System for Micro Production. Lecture Notes in Computer Science, 2014, , 133-138.	1.0	0
204	Konzept offener Regler: FPGA in der Antriebstechnik. Atp Magazin, 2014, 56, 26-33.	0.3	0
205	Compensation of Errors in Robot Machining with a Parallel 3D-Piezo Compensation Mechanism. Procedia CIRP, 2013, 7, 305-310.	1.0	17
206	Modularity in small machine tools. Production Engineering, 2013, 7, 483-490.	1.1	13
207	Component oriented and automatic generation of FE models for parallel kinematics. Production Engineering, 2013, 7, 233-237.	1.1	1
208	An Approach for a Cloud-based Machine Tool Control. Procedia CIRP, 2013, 7, 682-687.	1.0	31
209	Methodology to Apply Semantic Wikis as Lean Knowledge Management Systems on the Shop Floor. Procedia CIRP, 2013, 12, 444-449.	1.0	8
210	A new, uncertainty-aware cost-model for cost-benefit assessment of robot systems. , 2013, , .		4
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212	IPAnema: A family of Cable-Driven Parallel Robots for Industrial Applications. Mechanisms and Machine Science, 2013, , 119-134.	0.3	99
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