

Jörg Franke

List of Publications by Year in descending order

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Version: 2024-02-01

98
papers

813
citations

840776

11
h-index

839539

18
g-index

103
all docs

103
docs citations

103
times ranked

511
citing authors

#	ARTICLE	IF	CITATIONS
1	Aerosol Jet printing on rapid prototyping materials for fine pitch electronic applications. , 2011, , .		75
2	Machine Learning in Production â€œ Potentials, Challenges and Exemplary Applications. Procedia CIRP, 2019, 86, 49-54.	1.9	52
3	RÄumliche elektronische Baugruppen (3D-MID). , 2013, , .		43
4	Worker Information Systems: State of the Art and Guideline for Selection under Consideration of Company Specific Boundary Conditions. Procedia CIRP, 2016, 41, 1113-1118.	1.9	27
5	Blockchain-based application for the traceability of complex assembly structures. Journal of Manufacturing Systems, 2021, 59, 617-630.	13.9	25
6	A Lean Based Overview on Sustainability of Printed Circuit Board Production Assembly. Procedia CIRP, 2015, 26, 305-310.	1.9	22
7	Blockchain Enabled Traceability â€œ Securing Process Quality in Manufacturing Chains in the Age of Autonomous Driving. , 2018, , .		22
8	Intelligent cost estimation by machine learning in supply management: A structured literature review. Computers and Industrial Engineering, 2021, 160, 107601.	6.3	21
9	Optimized thin-film diffusion soldering for power-electronics production. , 2013, , .		20
10	Novel Ceramicâ€Based Material for the Applications of Molded Interconnect Devices (3Dâ€MID) Based on Laser Direct Structuring. Advanced Engineering Materials, 2018, 20, 1700824.	3.5	20
11	Capability of biopolymers in electronics manufacturing. , 2012, , .		18
12	Versatile autonomous transportation vehicle for highly flexible use in industrial applications. CIRP Annals - Manufacturing Technology, 2012, 61, 407-410.	3.6	17
13	6DoF Pose-Estimation Pipeline for Texture-less Industrial Components in Bin Picking Applications. , 2019, , .		17
14	A machine learning approach to estimate product costs in the early product design phase: a use case from the automotive industry. Procedia CIRP, 2021, 100, 643-648.	1.9	16
15	Fusing low-cost sensor data for localization and mapping of automated guided vehicle fleets in indoor applications. , 2015, , .		15
16	Influences on the reflow soldering process by components with specific thermal properties. Circuit World, 2009, 35, 35-42.	0.9	13
17	Static Versus Dynamic Provision of Worker Information in Manual Assembly: A Comparative Study Using Eye Tracking to Investigate the Impact on Productivity and Added Value Based on Industrial Case Examples. Procedia CIRP, 2016, 57, 504-509.	1.9	13
18	Automated magnet assembly for large PM synchronous machines with integrated permanent magnets. , 2013, , .		12

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19	A multi-perspective approach to support collaborative cost management in supplier-buyer dyads. International Journal of Production Economics, 2022, 245, 108380.	8.9	12
20	Innovative developments for automated magnet handling and bonding of rare earth magnets. , 2011, , .		11
21	Advanced substrate and packaging concepts for compact system integration with additive manufacturing technologies for high temperature applications. , 2015, , .		11
22	Enabling Live Data Controlled Manual Assembly Processes by Worker Information System and Nearfield Localization System. Procedia CIRP, 2016, 55, 242-247.	1.9	11
23	High-precision assembly of electronic devices with lightweight robots through sensor-guided insertion. Procedia CIRP, 2021, 97, 337-341.	1.9	11
24	Effiziente Erstellung, Distribution und Rückmeldung von Werkerinformationen in der Montage. ZWF Zeitschrift Fuer Wirtschaftlichen Fabrikbetrieb, 2009, 104, 822-826.	0.3	11
25	3D-Assembly of Molded Interconnect Devices with standard SMD pick & place machines using an active multi axis workpiece carrier. , 2011, , .		10
26	Investigations on ultrasonic copper wire wedge bonding for power electronics. , 2013, , .		10
27	Aerosol jet printing and lightweight power electronics for dielectric elastomer actuators. , 2013, , .		10
28	Highly Efficient Control System Enabling Robot Accuracy Improvement. Procedia CIRP, 2014, 23, 200-205.	1.9	10
29	Artificial neural networks for intelligent cost estimation – a contribution to strategic cost management in the manufacturing supply chain. International Journal of Production Research, 2022, 60, 6637-6658.	7.5	10
30	Deep learning based cost estimation of circuit boards: a case study in the automotive industry. International Journal of Production Research, 2022, 60, 6945-6966.	7.5	10
31	Disassembly, recycling, and reuse of magnet material of electric drives. , 2013, , .		9
32	Lean Information Management of Manual Assembly Processes: Creating IT-Based Information Systems for Assembly Staff Simultaneous to the Product Engineering Process. Applied Mechanics and Materials, 2013, 421, 546-553.	0.2	9
33	Electrical Functionalization of Thermoplastics by Combining Plasmadust Coating and Aerosol Jet Printing. Advanced Materials Research, 0, 1038, 43-48.	0.3	9
34	Approach for the production chain of printed polymer optical waveguides – an overview. Applied Optics, 2017, 56, 8607.	1.8	9
35	Mass production of planar polymer waveguides and their applications. Proceedings of SPIE, 2010, , .	0.8	8
36	Electronic module assembly. CIRP Annals - Manufacturing Technology, 2021, 70, 471-493.	3.6	8

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37	Challenges of the Miniaturization in the Electronics Production on the example of 01005 Components. , 2017, , 113-123.		8
38	Adapted assembly processes for flip-chip technology with solder bumps of 50 µm or 40 µm diameter. , 2010, , .		7
39	Worker Information Systems Including Dynamic Visualisation: A Perspective for Minimising the Conflict of Objectives between a Resource-Efficient Use of Inspection Equipment and the Cognitive Load of the Worker. Advanced Materials Research, 0, 1018, 23-30.	0.3	7
40	Smart Manufacturing Traceability for Automotive E/E Systems enabled by Event-Driven Microservice Architecture. , 2020, , .		7
41	Processing and reliability analysis of flip-chips with solder bumps down to 30 μm diameter. , 2011, , .		6
42	Cyber-Physical Electronics Production. Springer Series in Wireless Technology, 2017, , 47-78.	1.1	6
43	Energy Efficiency Investigation on High-Pressure Convection Reflow Soldering in Electronics Production. Applied Mechanics and Materials, 0, 655, 95-100.	0.2	5
44	Novel Approach for the Implementation of 3D-MID Compatible Routing Functionalities into Computer-Aided Design Tools. Advanced Materials Research, 0, 1038, 11-17.	0.3	5
45	Simulation of laser structuring by three dimensional heat transfer model. , 2014, , .		5
46	Investigations in the Optimization of Power Electronics Packaging through Additive Plasma Technology. Procedia CIRP, 2015, 37, 59-64.	1.9	5
47	Energy Efficiency Analysis of Vapor Phase Soldering Technology through Exergy-Based Metric. Applied Mechanics and Materials, 2015, 805, 196-204.	0.2	5
48	A novel engineering process for spatial opto-mechatronic applications. CIRP Annals - Manufacturing Technology, 2016, 65, 153-156.	3.6	5
49	Laser-assisted Selective Activation of Injection Molded Chip Packaging Devices with Thermoset Substrate Materials for Intelligent Connectivity Systems in Automobiles. Procedia CIRP, 2017, 63, 101-106.	1.9	5
50	Decentralized Intelligence: The Key for an Energy Efficient and Sustainable Intralogistics. Procedia Manufacturing, 2018, 21, 679-685.	1.9	5
51	Data continuity and traceability in complex manufacturing systems: a graph-based modeling approach. International Journal of Computer Integrated Manufacturing, 2021, 34, 549-566.	4.6	5
52	An empirical investigation into intelligent cost analysis in purchasing. Supply Chain Management, 2022, 27, 785-808.	6.4	5
53	Reliability of molded interconnect devices (MID) protected by encapsulation methods overmolding, potting and coating. , 2012, , .		4
54	Virtual Commissioning of 6 DoF Pose Estimation and Robotic Bin Picking Systems for Industrial Parts. IFAC-PapersOnLine, 2019, 52, 160-164.	0.9	4

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55	Distributed Camera Architecture for Seamless Detection and Tracking of Dynamic Obstacles. Procedia CIRP, 2020, 91, 342-347.	1.9	4
56	Two Approaches for the Design of Molded Interconnect Devices (3D-MID). Advances in Intelligent and Soft Computing, 2010, , 67-78.	0.2	4
57	Aerosol-Jet Printing for Functionalization of Prototyping Materials for Electronic Applications. International Symposium on Microelectronics, 2012, 2012, 000741-000748.	0.0	4
58	Accelerated Life Tests of Flip-Chips With Solder Bumps Down to 30 $\hat{1}$ / ₄ m Diameter. International Symposium on Microelectronics, 2011, 2011, 000985-000996.	0.0	4
59	Wafer Level Solder Bumping and Flip Chip Assembly with Solder Balls Down to 30 $\hat{1}$ / ₄ m. International Symposium on Microelectronics, 2011, 2011, 000953-000960.	0.0	4
60	Virtual training and commissioning of industrial bin picking systems using synthetic sensor data and simulation. International Journal of Computer Integrated Manufacturing, 2022, 35, 483-492.	4.6	4
61	Dynamic Light Control Using Bionic Dielectric Elastomer Iris Actuators. Advanced Functional Materials, 2022, 32, .	14.9	4
62	Processing and qualification of polymer based pastes in electronics production. Physics Procedia, 2010, 5, 727-733.	1.2	3
63	Smart grid requirements and expectations from a future home perspective. , 2012, , .		3
64	Reliability study of lead-free flip-chips with solder bumps down to 30 $\&\#x03BC$ m diameter. , 2012, , .		3
65	My new colleague has artificial muscles: a DEA based approach for inherently compliant robotic systems. Production Engineering, 2014, 8, 711-717.	2.3	3
66	Shortening Innovation Cycles by Employee Training Based on the Integration of Virtual Validation into Worker Information Systems. Procedia CIRP, 2015, 37, 65-70.	1.9	3
67	Is selective laser melting (SLM) an alternative for high-temperature mechatronic integrated devices? methodology, hurdles and prospects. , 2016, , .		3
68	Evaluation of the coupling performance and long-term stability of aerosol jet printed and photolithographic manufactured waveguides for asymmetric optical bus couplers. , 2019, , .		3
69	Assembly and interconnection technologies for MID based on thermally conductive plastics for heat dissipation. , 2011, , .		2
70	Usage of Industrial Robots as Flexible Handling Devices Supporting the Process of Three Dimensional Conductive Pattern Generation. Advanced Materials Research, 0, 1038, 89-94.	0.3	2
71	A Comprehensive Study on the Automation Potentials and Complexities of Advanced and Alternative Die-Attach Technologies for Power Electronic Applications. Applied Mechanics and Materials, 0, 794, 320-327.	0.2	2
72	Control strategy for an industrial process monitoring robot. , 2016, , .		2

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73	A Wireless Angle and Position Tracking Concept for Live Data Control of Advanced, Semi-Automated Manufacturing Processes. <i>Sensors</i> , 2020, 20, 2589.	3.8	2
74	Generation of Printed Electronics on Thermal Sensitive Substrates by Laser Assisted Sintering of Nanoparticle Inks. , 2021, , .		2
75	Electrical and mechanical characterization of medical grade silicones as dielectric layers in aerosol jet printed dielectric elastomers. , 2021, , .		2
76	Effiziente rechnergestützte Produktentwicklung für räumliche elektronische Baugruppen. <i>ZWF Zeitschrift Für Wirtschaftlichen Fabrikbetrieb</i> , 2009, 104, 925-930.	0.3	2
77	Accelerated aerosol-jet-printing of stretchable rGO-electrodes for stacked dielectric elastomers by using a new hybrid atomizer. , 2020, , .		2
78	Information Asymmetry in Business-to-Business Negotiations: A Game Theoretical Approach to Support Purchasing Decisions with Suppliers. <i>Group Decision and Negotiation</i> , 2022, 31, 723-745.	3.3	2
79	Investigations in selective laser melting as manufacturing technology for the production of high-temperature mechatronic integrated devices. , 2016, , .		1
80	Additive waveguide manufacturing for optical bus couplers by aerosol jet printing using conditioned flexible substrates. , 2017, , .		1
81	Towards an Energy Efficient Series Production of High Performance Permanent Magnet Synchronous Motors by Selective Magnet Assembly. <i>Applied Mechanics and Materials</i> , 0, 882, 111-118.	0.2	1
82	Technical Modelling Approach for Spatial Integrated Optomechatronic Products. <i>Procedia CIRP</i> , 2019, 84, 713-718.	1.9	1
83	Investigation of Pressureless Sintered Interconnections on Plasma Based Additive Copper Metallization for 3-Dimensional Ceramic Substrates in High Temperature Applications. , 2019, , .		1
84	Closed-Loop Control of Patient Handling Robots. <i>Studies in Computational Intelligence</i> , 2013, , 231-241.	0.9	1
85	Electromigration Performance of Flip-Chips with Lead-Free Solder Bumps between 30 $\hat{1}$ / ₄ m and 60 $\hat{1}$ / ₄ m Diameter. <i>International Symposium on Microelectronics</i> , 2012, 2012, 000891-000905.	0.0	1
86	Feasibility Studies on Selective Laser Melting of Copper Powders for the Development of High-temperature Circuit Carriers. <i>International Symposium on Microelectronics</i> , 2016, 2016, 000517-000522.	0.0	1
87	Substrate Pretreatments: An Investigation of the Effects on Aerosol Jet Printed Structures. , 2019, , 352-360.		1
88	A cost-effective stereo camera system for online pose control of patient handling robots. , 2011, , .		0
89	Cutting-Edge Engineering - An Innovative Approach to Better Support the Engineering and the Life Cycle of Automated Production Systems. <i>Advanced Materials Research</i> , 0, 628, 445-450.	0.3	0
90	Towards an engineering community as driver and basic tool support for lean approaches in engineering projects. , 2012, , .		0

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91	Characterizing the placement accuracy of a handling unit used for assembling 3D circuit carriers. , 2013, , .		0
92	Design and Solder Process Optimization in MID Technology for High Power Applications. Advanced Materials Research, 2014, 1038, 107-112.	0.3	0
93	Influential parameters in the development of Transient Liquid Phase Soldering (TLPS) as a new interconnect system for high power lighting applications. , 2015, , .		0
94	Potential analysis of the use of electric storage heaters for demand side management applications. , 2016, , .		0
95	Distributed Software Architecture for AGVs for Separation of Dynamic and Static Obstacles. Procedia Manufacturing, 2019, 38, 367-374.	1.9	0
96	Aerosol jet printed AgNW electrode and PEDOT:PSS layers for organic light-emitting diode devices fabrication. , 2021, , .		0
97	Distributed Software Architecture for Type-Specific AGV Routing. , 2019, , 54-63.		0
98	Diffusion Soldering. , 2019, , 503-506.		0